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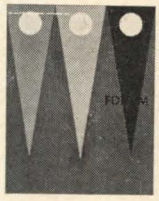
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Cover design by Charlotte Winter

THE ARCHITECTURAL FORUM
Vol. 127 No. 1. July/Aug. issue.
Published 10 times a year, combining Jan./Feb. and July/Aug. issues, by Urban America, Inc., 111 W. 57 St. New York, N. Y. 10019.
Sent without charge to architects registered within the U.S.A. Qualified persons are invited to write the Circulation Manager on company letterhead. Please give your principal state of architectural registration, your title, and the kind of work you do. Correspondence regarding service, change of address, etc., should be sent to the Circulation Manager.
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Single copies, $1.50.
Member of Business Publications Audit of Circulation, Inc.
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PUBLISHER'S NOTE

The most recent addition to the rising tide of urban literature is Urban America's own magazine, *City*. We extend a very special welcome to the new bi-monthly review for very special reasons.

First of all, because of its publication, no longer will we have to explain that THE ARCHITECTURAL FORUM is not the headquarters' voice of Urban America. *City* is. THE FORUM remains what it has been since its acquisition by Urban America, the magazine about architecture and urban design for architects and other urban designers.

Secondly, we were sure that when former FORUM managing editor, Don Canty, went to Washington to direct Urban America's Urban Information Center, he wouldn't forget that he was primarily a journalist. *City*, with Canty as its editor, proves we were right. The current July issue presents its wide variety of articles on current urban issues in a readable format which, for illustrations, eschews the camera for bold art.

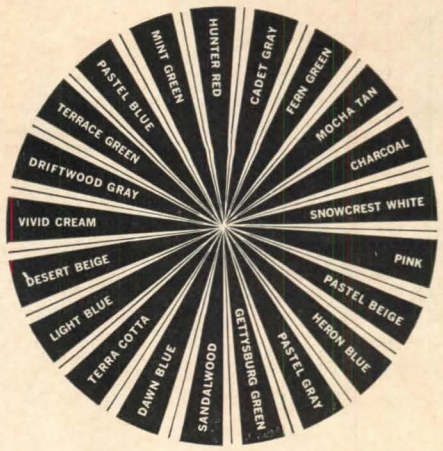
Our welcome is warm, too, because *City's* masthead includes the names of Louise Campbell, another one-time FORUM senior editor, and Peter Bradford, ex-FORUM art staff member and currently a frequent cover designer.

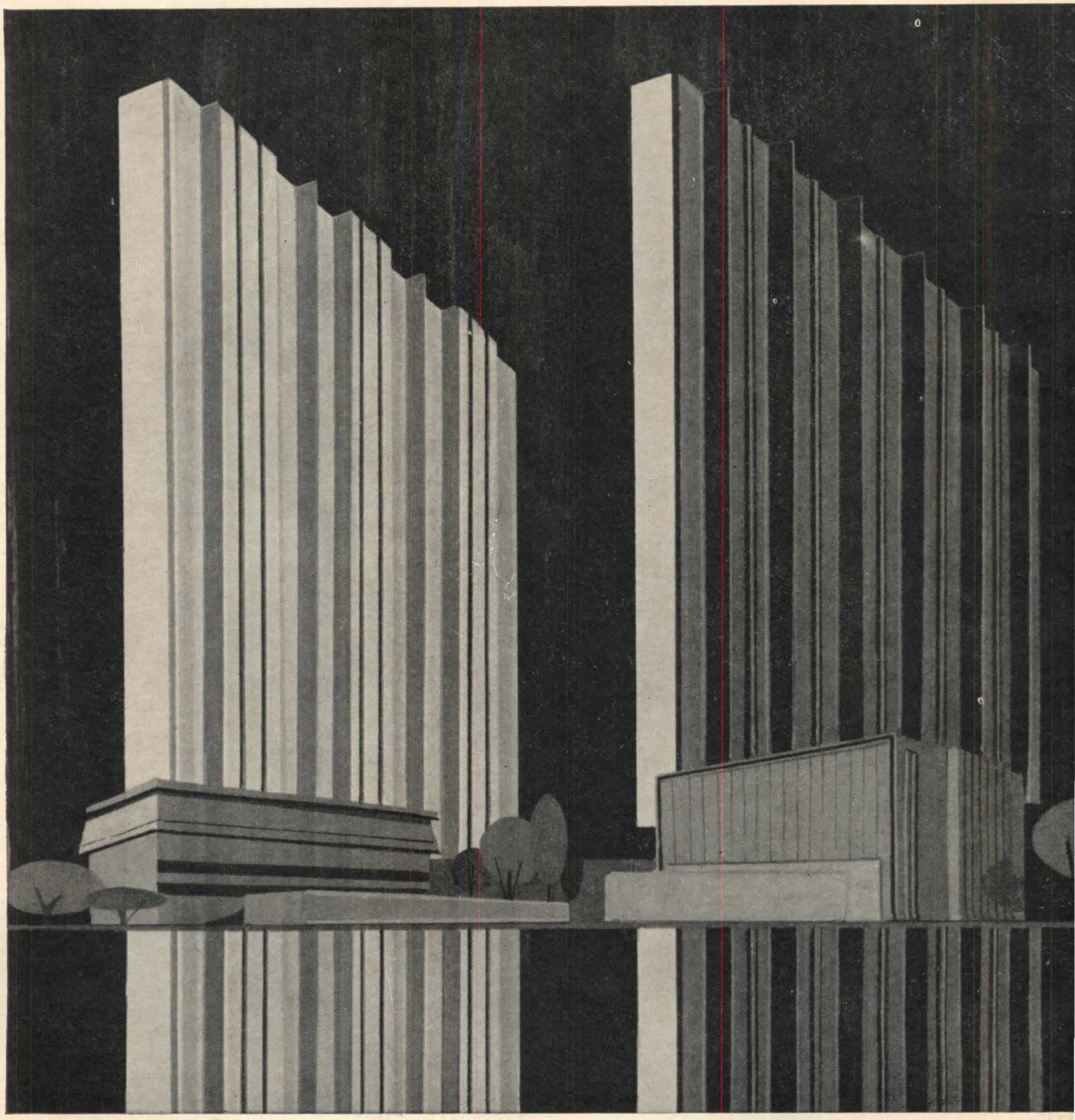
As the official publication of Urban America, its Nonprofit Housing Center, its Business and Development Center, its Urban Design Center, its Urban Information Center, its Urban Policy Center, *City* accepts no advertising. For that reason, too, we welcome it.

* * *

We ruefully admit that our contest to identify the components of the May cover skyline attracted fewer contestants than the somewhat more widely promoted Lucky Buck games sponsored by the gasoline station people. To make everything legal, however, we promise to announce the winners next month. —L.W.M.

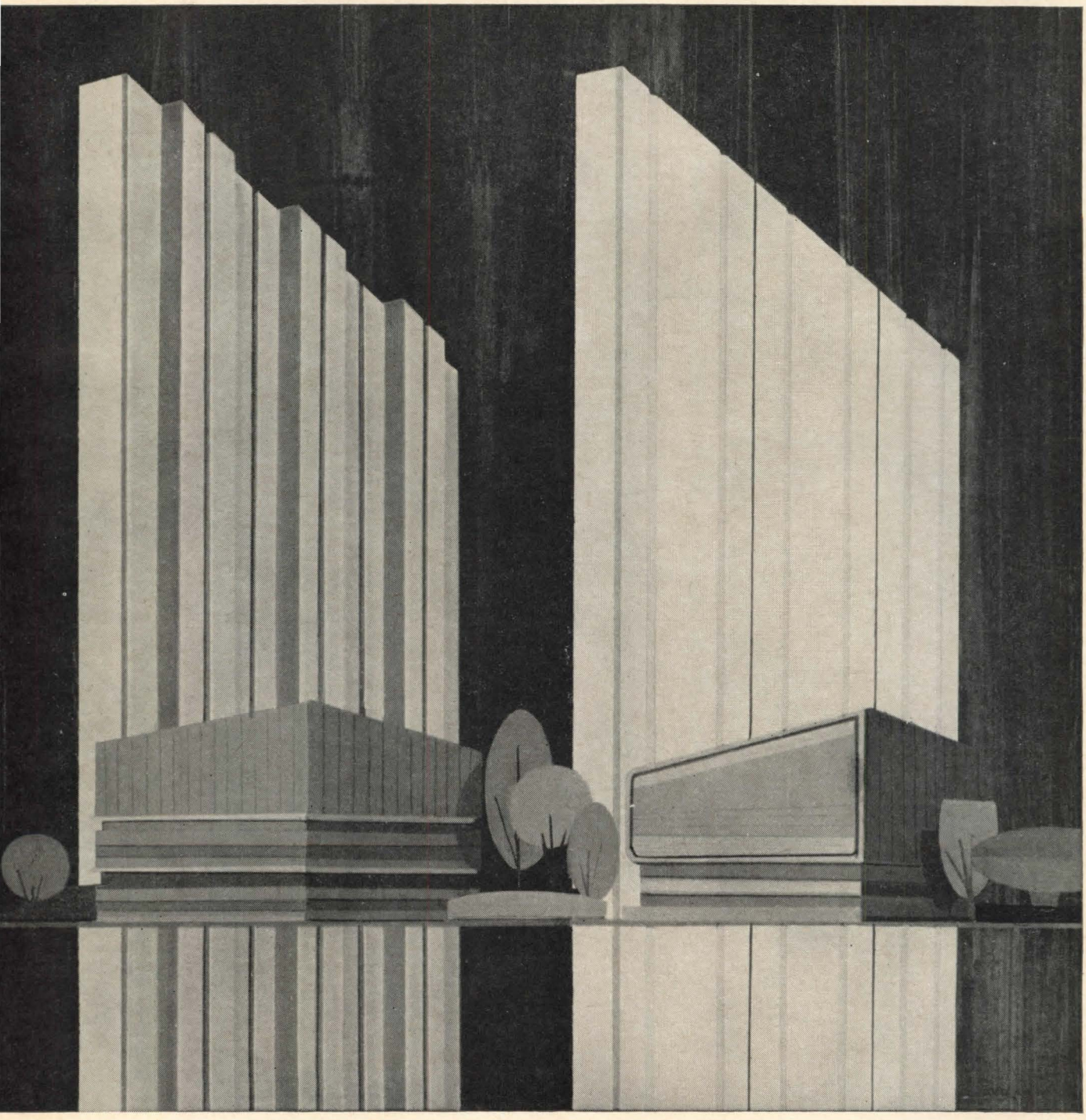
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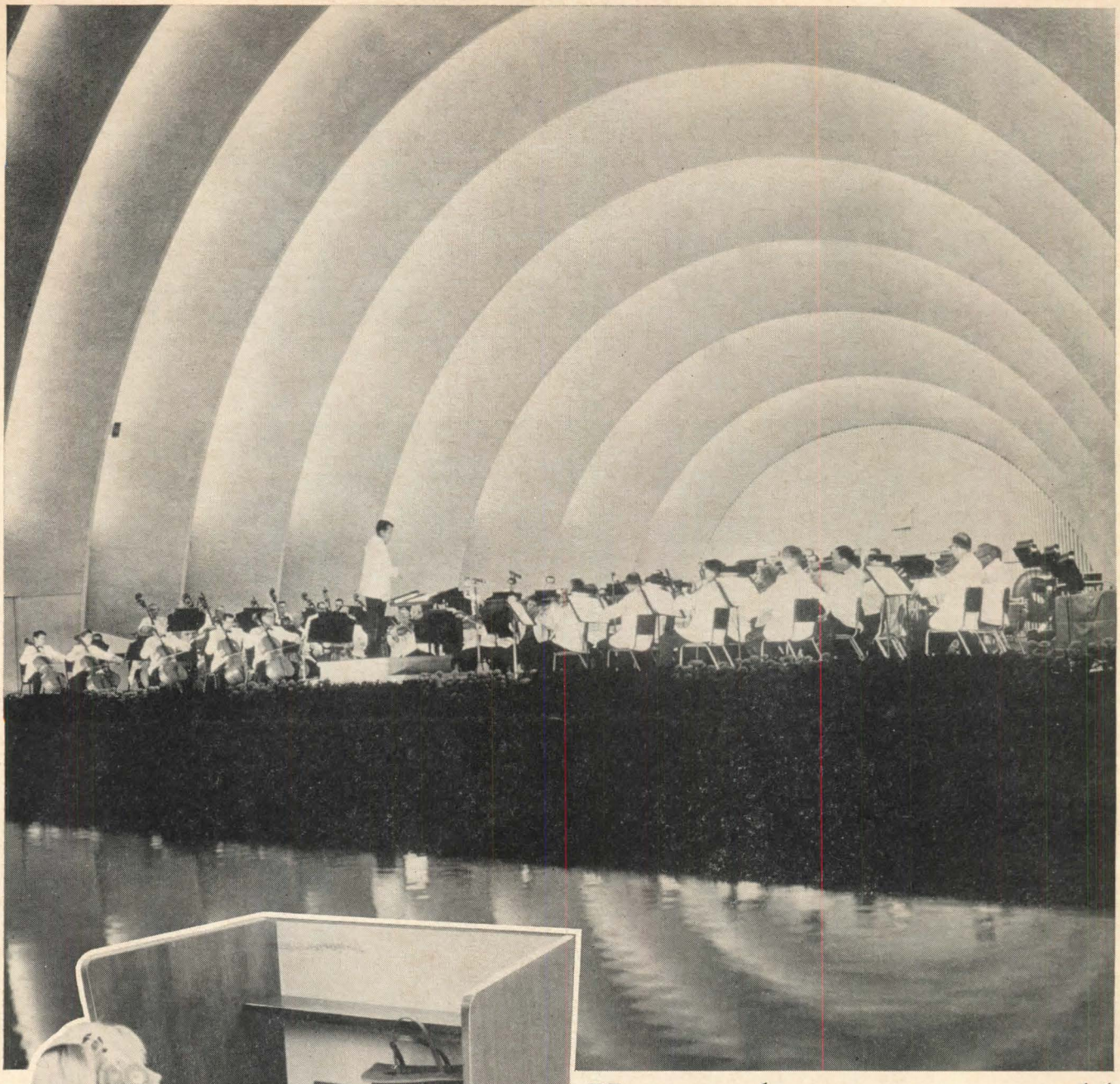




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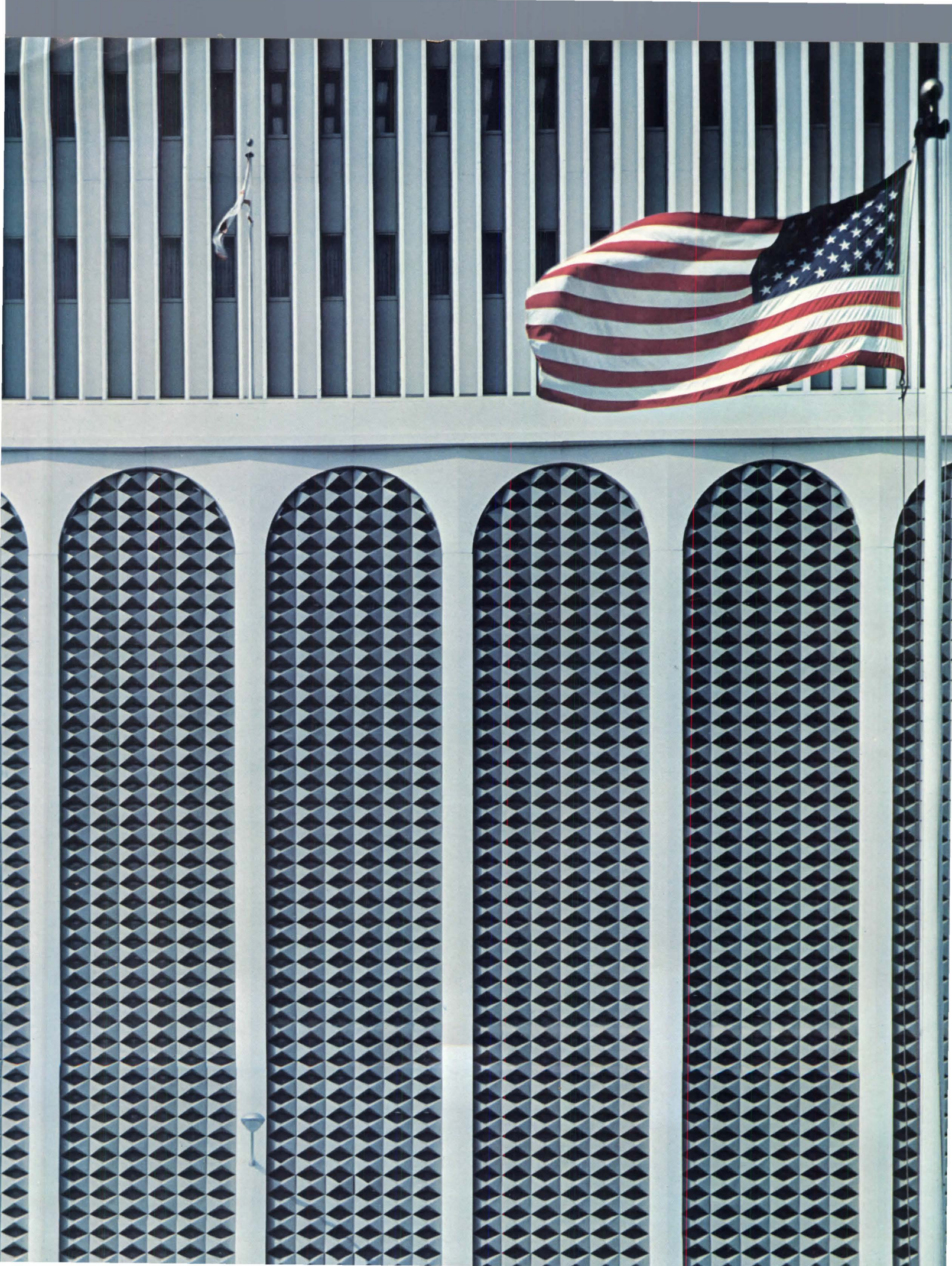


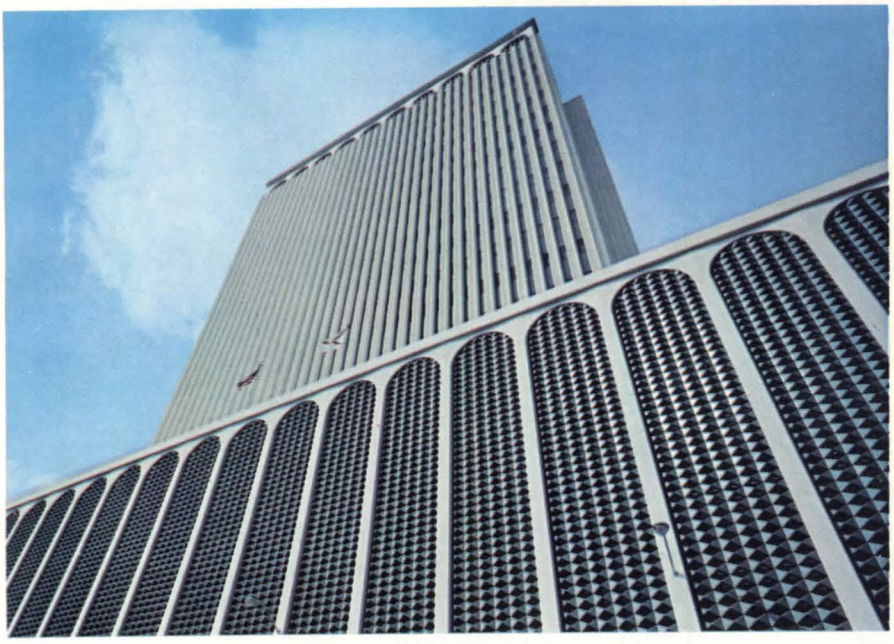
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Tampa, Fla.
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The Sol Dec application on the Tampa Bank Building is the largest on record, enclosing a nine-level parking garage at the base of the building. For air circulation and light, 34 percent of the solar screening system is open area. An aluminum curtain wall, with porcelain-coated extrusions for trim caps and window frames, covers the remaining 13 floors of the building.

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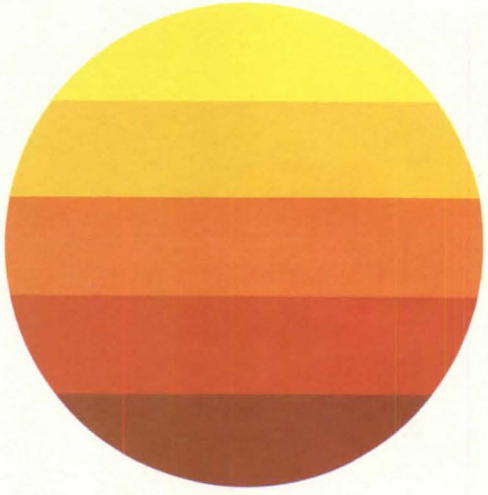


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Associated Architects: Stevenson Flemer, Eason Cross and Harry Adreon

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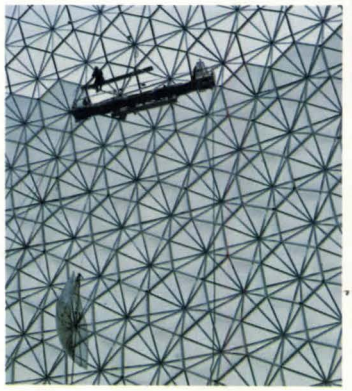
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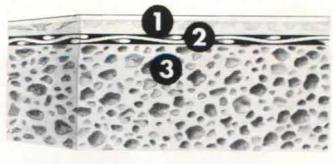
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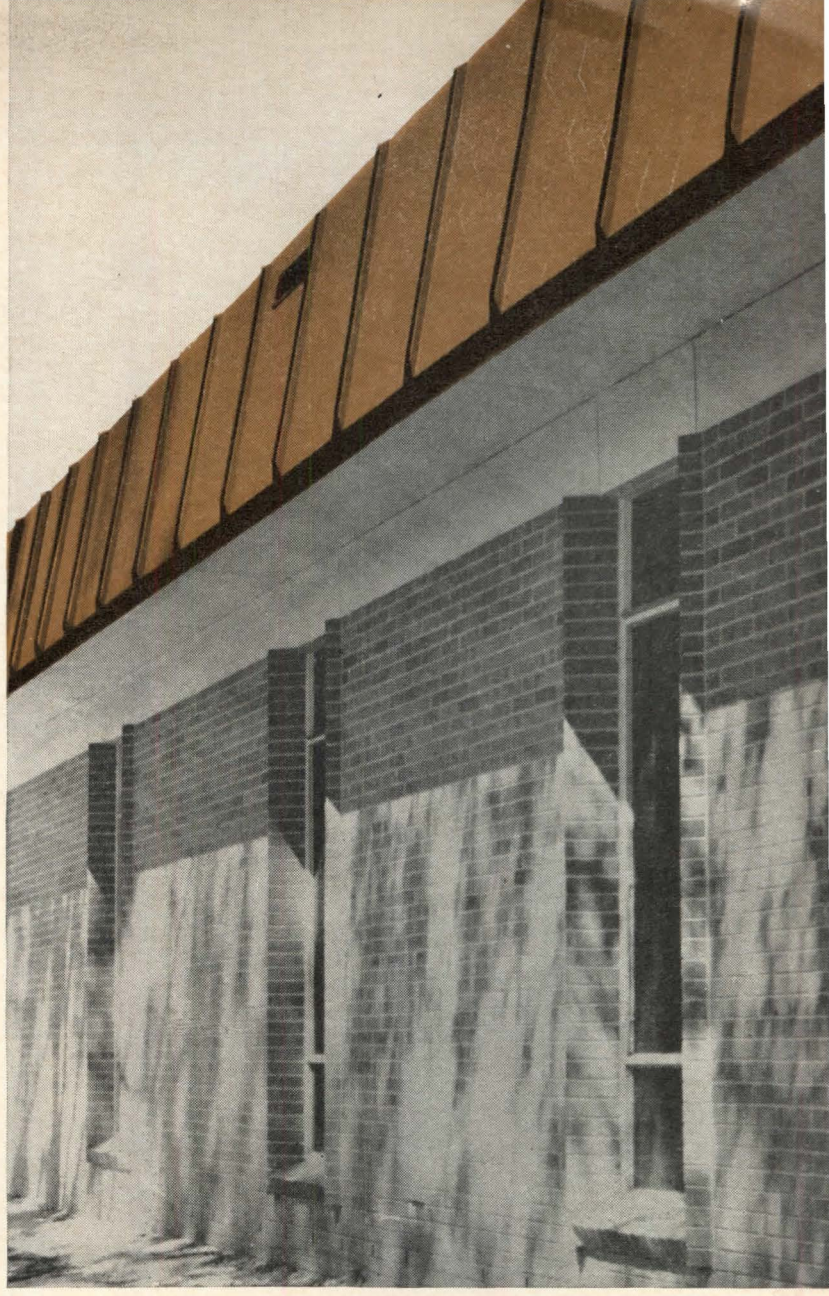
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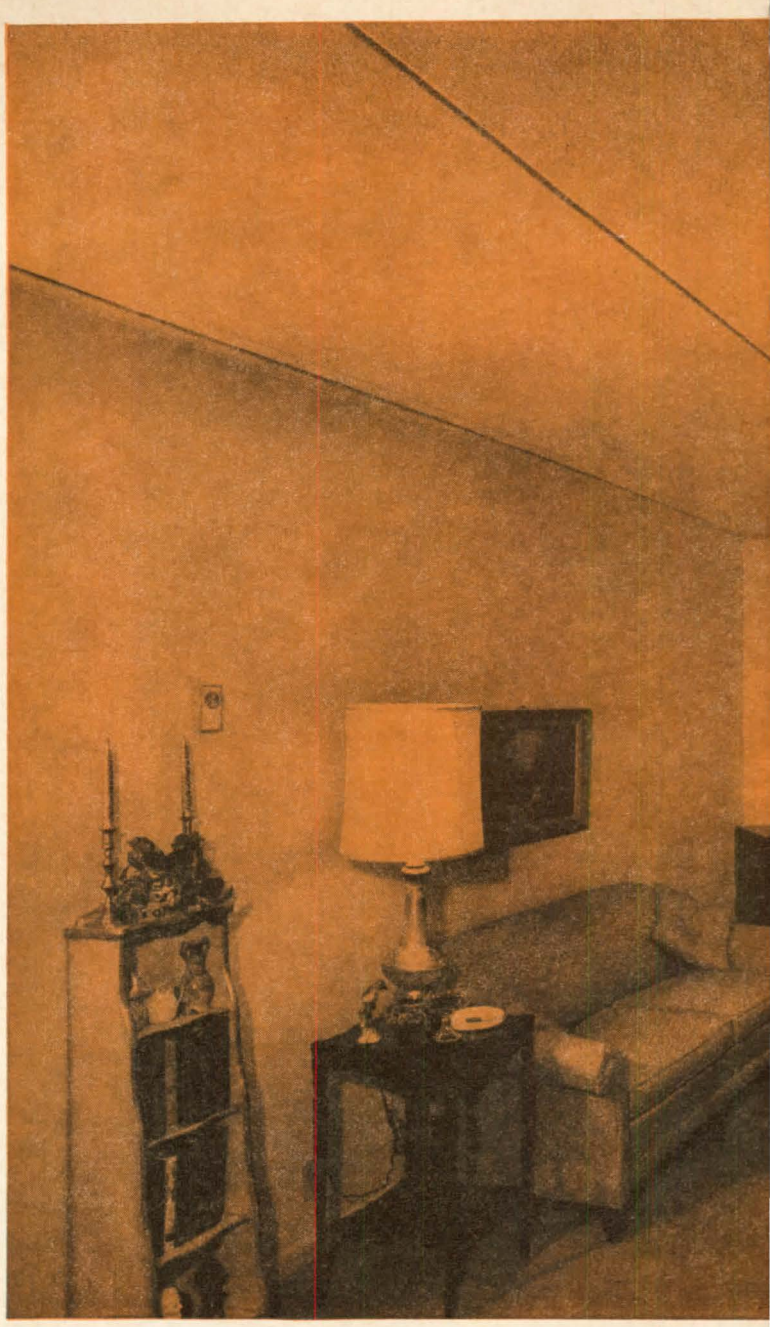
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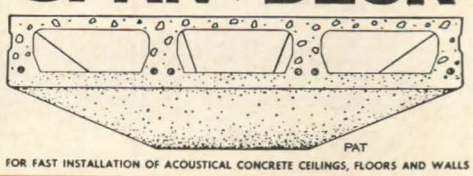
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LETTERS

VENTURI'S BOOK

Forum: Peter Blake's review in the June issue of Mr. Venturi's book, *Complexity and Contradiction in Architecture,* is far too generous. He states that "the bulk of Mr. Venturi's book—a sensitive and intelligent essay on architectural theory—seems perfectly valid and quite intriguing." This is grossly incorrect. Mr. Venturi's position is based on false philosophical premises and is fundamentally indefensible.

Venturi proposes the following (among other things) as standards for the practice of architecture: complexity, contradiction, ambiguity, perversity, boredom, conventionality, redundancy, inconsistency, equivocation, messyness, nonsequiturs, and the creation of tension. (These are his own words). In short, he is proposing an architecture of the absurd.

This is by no stretch of the imagination "perfectly valid." The review correctly, though inconsistently, concluded that if his proposals were taken seriously, they would "make the mind boggle."

I disagree, however, with the reviewer's inclination *not* to take them seriously. When a book is written and presented seriously by an architect whose work is being published in professional journals and who has been winning national design competitions; when it is seriously championed by Vincent Scully, one of the country's best-known architectural critics, as being "a deeply systematic analysis"; when it is supported by Arthur Drexler and published by the Museum of Modern Art as being a "paper concerned with the theoretical background of modern architecture"; when the book has been heralded by the "Eastern Architectural Establishment" as being a work "of supercataclysmic proportions"; then it must be taken seriously.

Mr. Venturi's words and buildings must be judged as they stand. He must not be permitted, much less encouraged, to run away when he is found holding a bag of nonsense by saying, "I was joking, don't you see, I really didn't mean it." Mr. Venturi probably wants to have his cake and eat it too, to be able to pawn his book off on the pop-art-eating public as an abstruse, serious and scholarly work and at the same time be able to say that he was joking in the event that someone calls his bluff.

Mr. Venturi's position is fundamentally wrong and destructive. His bluff must be called and a giggle must not be accepted as a defense.

Birmingham, Mich. JOHN D. HILBERRY

Forum: I thoroughly enjoyed your review of Robert Venturi's alleged "gentle manifesto." You were very generous in giving so much space to such a little book, and for reproducing some of the illustrations in larger size than in the original publication, which had a ridiculous format.

DONALD HOFFMANN
The Kansas City Star *Art editor*

Forum: Begging your pardon, but it was obviously in Forum's August 1955 issue, 12 years ago, and not 1965, that the story came out about the Harvard students' fresh approach to Times Square, to which Peter Blake refers in his interesting review of Venturi's "Complexity, etc.," in the June 1967 issue.

Even proofreaders seem to have trouble believing how early the decisive creations come out compared with the labels tagging them.

New York City DOUGLAS HASKELL

BALTIMORE'S WALKWAYS

Forum: A correction is in order concerning the Charles Center second level walkway system mentioned in the article about John Johansen's Mechanic Theater. The only parts of the upper-level walk proposed in the 1958 plan which will not be built are the twin sections joining the Federal Building to the rest of the walkways. This is because the U. S. Government simply would not permit it. The balance of the system as it is, and is currently being developed, remains amazingly faithful to the original concept.

JAMES NELSON KISE
Director,
Washington, D. C. *Urban Design Center*

Granted, a few sections of upper-level walkway not strictly needed for crossing streets have survived in plan (though hardly any have yet been built). But the omitted sections were major ones, and the remaining parts have shrunk in area. Of course, separation of cars and people throughout a 22-acre urban-core site is in itself an achievement, which we do not mean to belittle.—ED.

SYSTEMS AND CREDITS

Forum: Several of our architect friends have directed our attention to your May issue and the excellent presentation on relocatable and prefabricated buildings with special emphasis on your story on the installation of the Syntex Interim Facility at Palo Alto, Calif.

We feel (very strongly) that Ian MacKinlay & Associates were responsible for a concept that has been a credit to everyone concerned. This feeling is confirmed every time we visit this project and see the "space frame" and colors which contribute so much to the viewer's enjoyment and realization of the architect's skill.

In establishing the credits for design you have rightfully recognized a most capable architectural organization. In addition, the mechanical and electrical consultants named—Bobrick & Associates and Scott Beamer & Associates—contributed greatly to establishing the concept and to the central supply and site systems and furnishing the general supervision.

As consultants to the building manufacturer, this office handled the actual design of all the interior lighting, air conditioning, and plumbing systems. These systems were assembled as a part of the package furnished by Designed Facilities Corporation. The space requirements in a project of this kind are rather formidable and we do think that this effort in our office was a contribution to the overall project—even in a pedestrian way.

Again—our compliments.

EDWARD F. WEHLAGE
Professional Engineer
Whittier, Calif. *Wehlage Associates*

APPRECIATIVE READER

Forum: I receive The Architectural Forum each month without charge and thoroughly enjoy each issue, reading it cover to cover. I personally feel indebted to Architectural Forum for it was the initial and deciding factor in my becoming an architect. My first subscription was in 1942 and, as a GI in World War II, I enjoyed many restful bunk sessions reading the Forum. Your present efforts to keep our vision spread over the urban subject is most appreciated. In my own work as a civil servant architect, sympathizing with the public's needs is a prerequisite. . . . Often we lose sight of the varied interests that influence the business of being an architect. I have taken a personal interest in the responsibility of arousing the public to the reality of beauty. And so I distribute my art works . . . giving support to a neglected element in our lives.

. . . In appreciation for keeping me alert to elements that can be generally upgraded by concerned architects.

SIDNEY GORDON BUDNICK
Sacramento, Calif. *Architect*

HOW'S THAT AGAIN?

Forum: May I call your attention to a slight error in the first paragraph of your June article on Aalto's library. This refers to the institution under the name of Mt. Angel Benedictine College, Mt. Angel, Oregon.

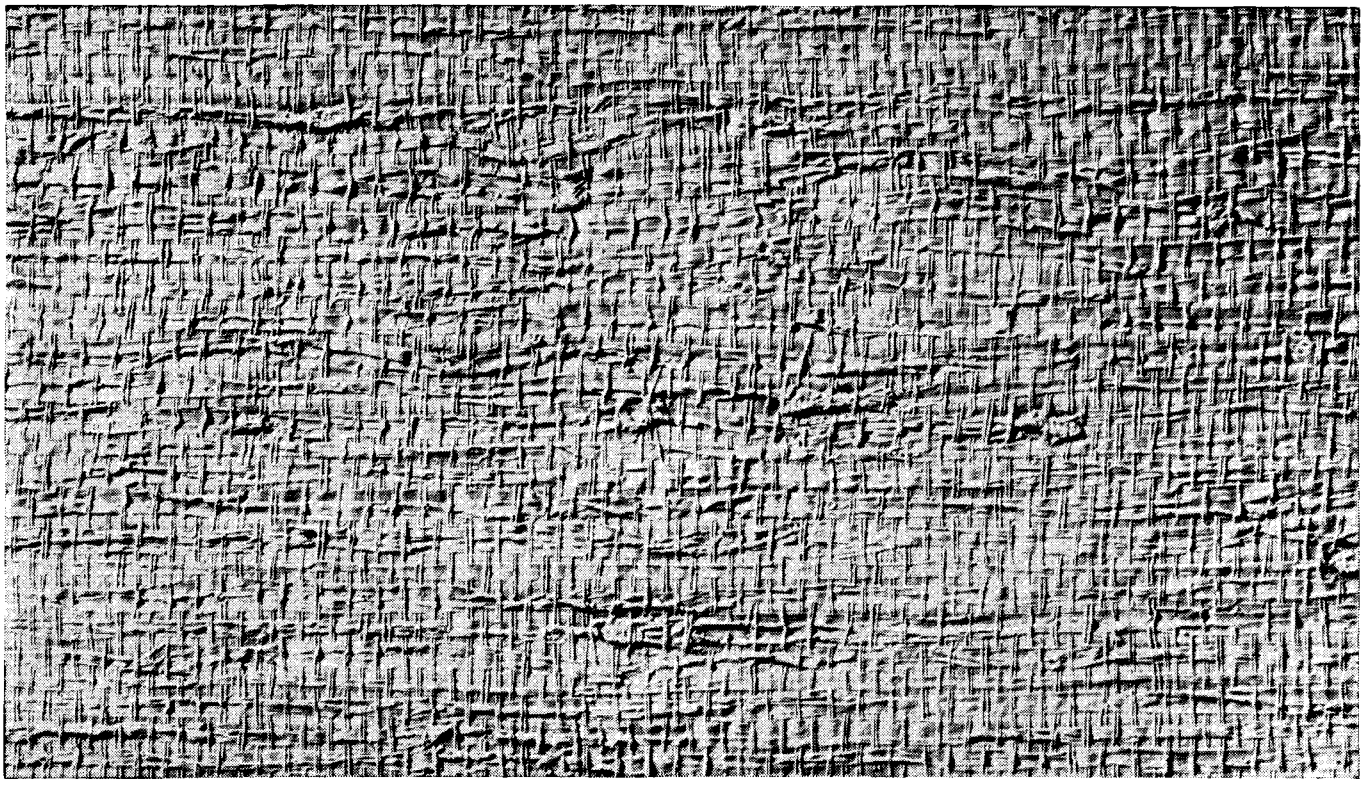
This small town, population 2,000, has two colleges. The one college, run by the Benedictine sisters, is known as Mt. Angel College. Its correct address is Mt. Angel, Oregon. Mt. Angel Abbey at St. Benedict, Oregon, one mile away, is the other institution.

To complete the confusion we might add that, until 1947, we did indeed conduct Mt. Angel College. As of that date we have been operating Mt. Angel Major Seminary and Mt. Angel Minor Seminary. The correct reference in the article would be Mt. Angel Abbey, St. Benedict, Oregon.

FATHER BARNABAS, O.S.B.
St. Benedict, Ore. *Mt. Angel Abbey*

Our apologies to all concerned. Coincidentally, another case of dislocation cropped up in the June issue. The Forum also erred in reporting that Carnegie Tech architecture students had protested the selection of Charles Luckman as architect for "an addition to the campus." Luckman, in fact, had been commissioned to make preliminary studies for an addition to the Museum of Art at Carnegie Institute, which is administered separately from Carnegie Institute of Technology. It was in protest to this commission that the students demonstrated. (Carnegie Tech has been renamed Carnegie-Mellon University.) Is everything clear now?—ED.

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We call ours Tamara. It's a Koroseal vinyl wall covering.

It gives you the same expensive look of natural grass cloth, but there the similarity ends.

Koroseal is economical.

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Bundi City Palace Gate, perched high atop a hill in Rajasthan, India, was built in 1507. Spikes embedded in the door were meant to discourage using elephants as battering rams. If you would like a specially prepared reproduction made from this photograph, write to Schlage Lock Company, Box 3324, San Francisco.

Some people believe a door should keep you safe and sound. Schlage does.

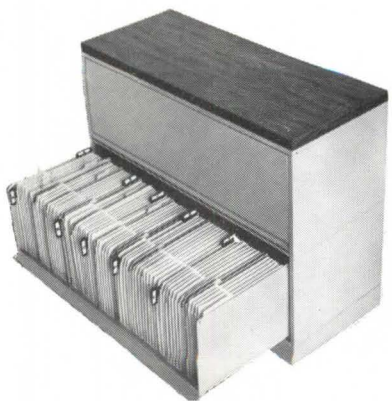
Security is one of man's age-old needs. Security from rain, gale, icy storm, and, sadly, his fellow man. You design a solid roof and sturdy walls to foil the elements; you put a lock on the door to foil the outlaw. When you lock a man's home throughout with Schlage you have done as effective a job as possible. The security of our locking hardware begins with the design integrity of the cylindrical lock, invented and patented by Walter Schlage. For forty years we have researched and refined our lock to the point where it can be truly said, "There is no equal". Our locks are the standard against which other cylindrical locks are measured. Because, to our inherent design superiority we add superior structural materials. Premium metals, rigid tolerances, exacting inspections—these combine to produce a lock of enduring security. One that requires virtually no maintenance throughout a long, useful life. Security, durability, beauty, the widest range of designs and finishes in the industry: no other lock company can offer you as much.

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TEXTURE



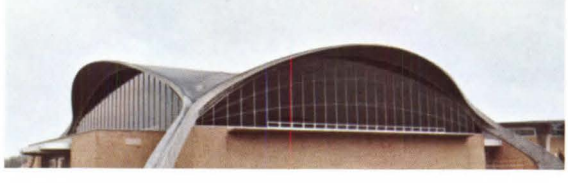
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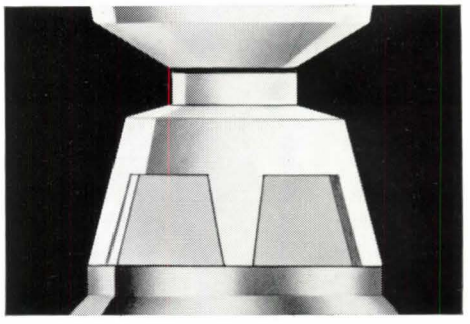


Tectum form plank shapes this roof and ceiling at George Williams College Leisure and Creative Arts Center, Downers Grove, Illinois.

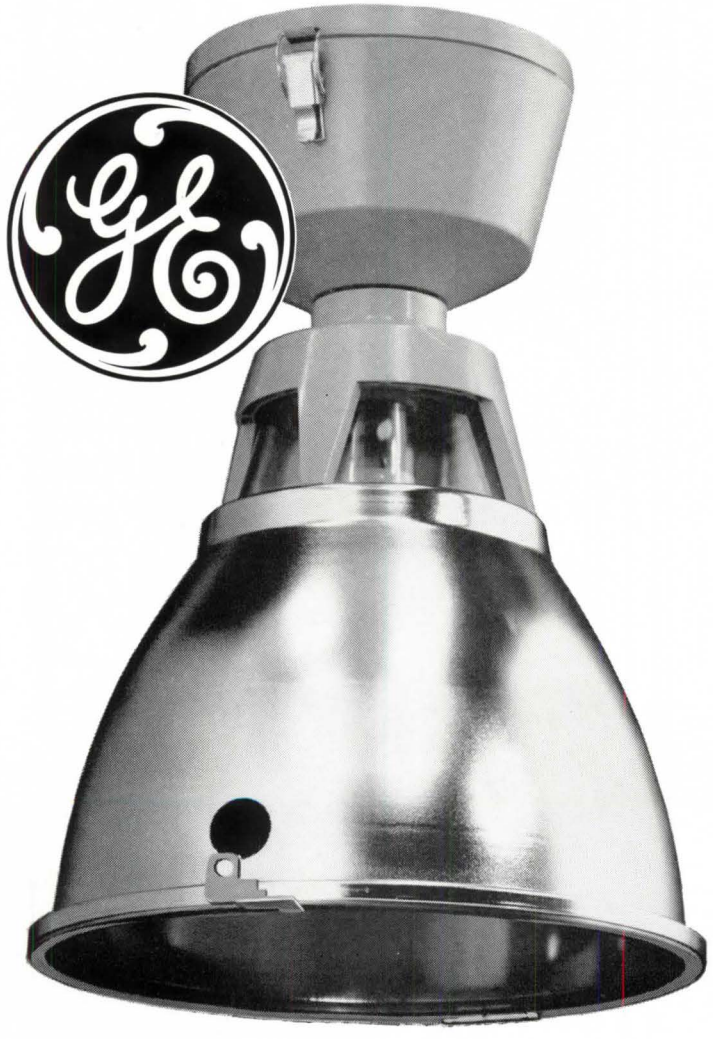
Architects: Mittelbusher & Tourtelot, Chicago.
Contractor: Turner Construction Company, Chicago.
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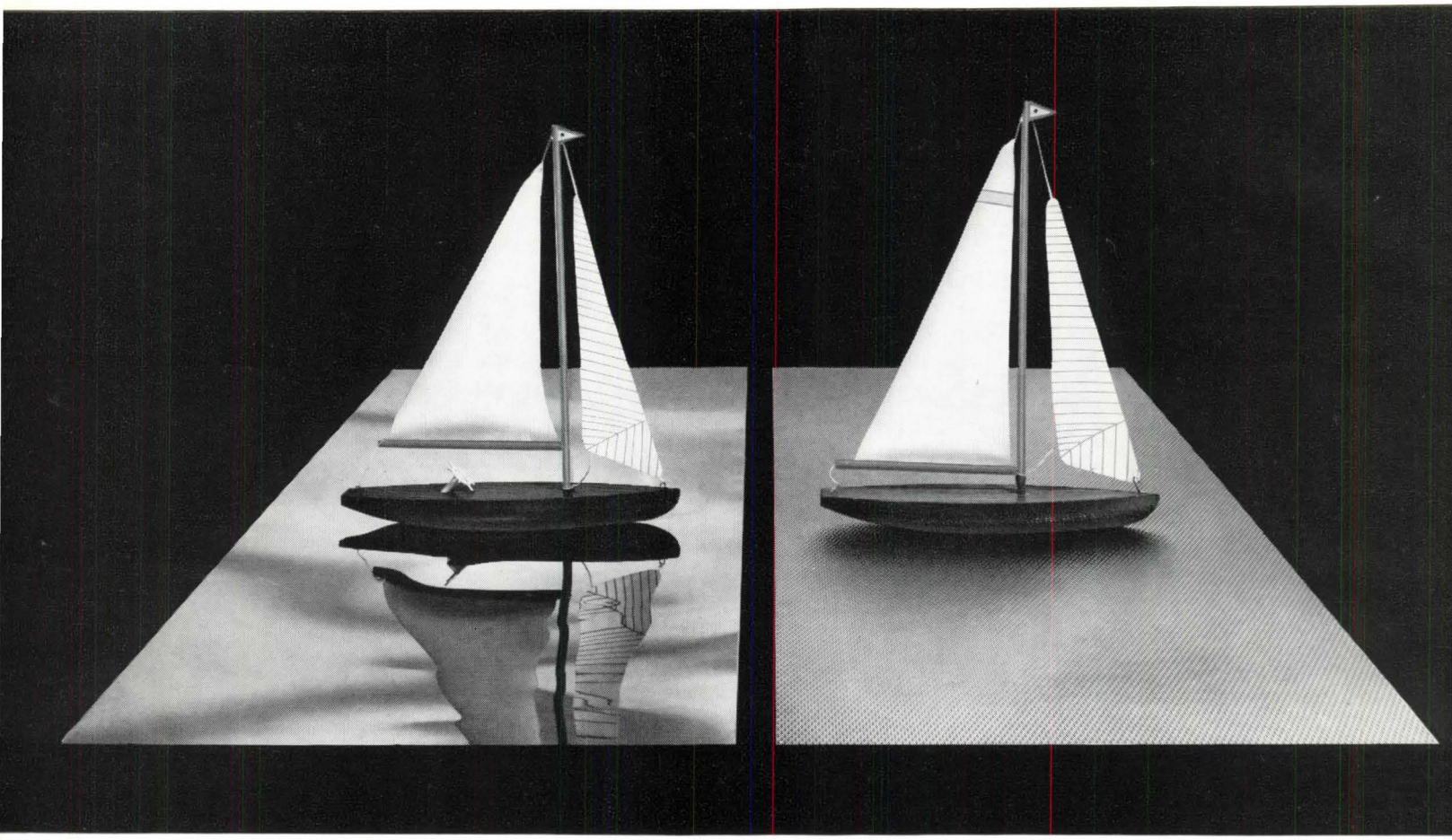
You can't afford to just think about it, can you? You specify from the materials at hand. Nevamar knows this. That's why Intaglio is here now. The only honest, three-dimensional solid color laminate in the industry. Suddenly all those surfaces that usually get short changed have a new champion. Doors come alive with interesting color. Non-writing surfaces take on rich new dimension. Cabinets and headboards blend into the scheme of things. Nevamar Intaglio does it all, and does it with a talent for stain and scratch resistance that's unrivaled. Maybe some year other laminators will stop just thinking about three-dimensional solid color laminate and do it. (By then we'll have something else for them to think about.)

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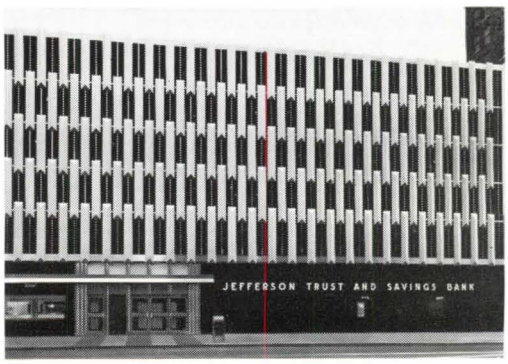
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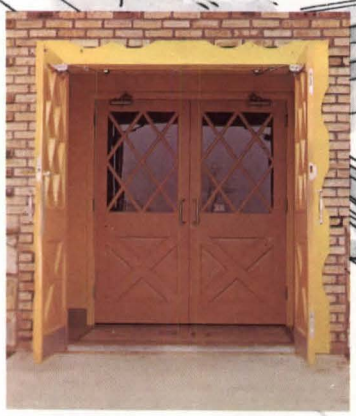




NORTON SERIES 7000 CLOSERS



NORTON SERIES CC-900 CLOSERS



NORTON SERIES 6100 CONTROLS

Again, in Commercial Buildings.



NORTON SERIES 1600 CLOSERS

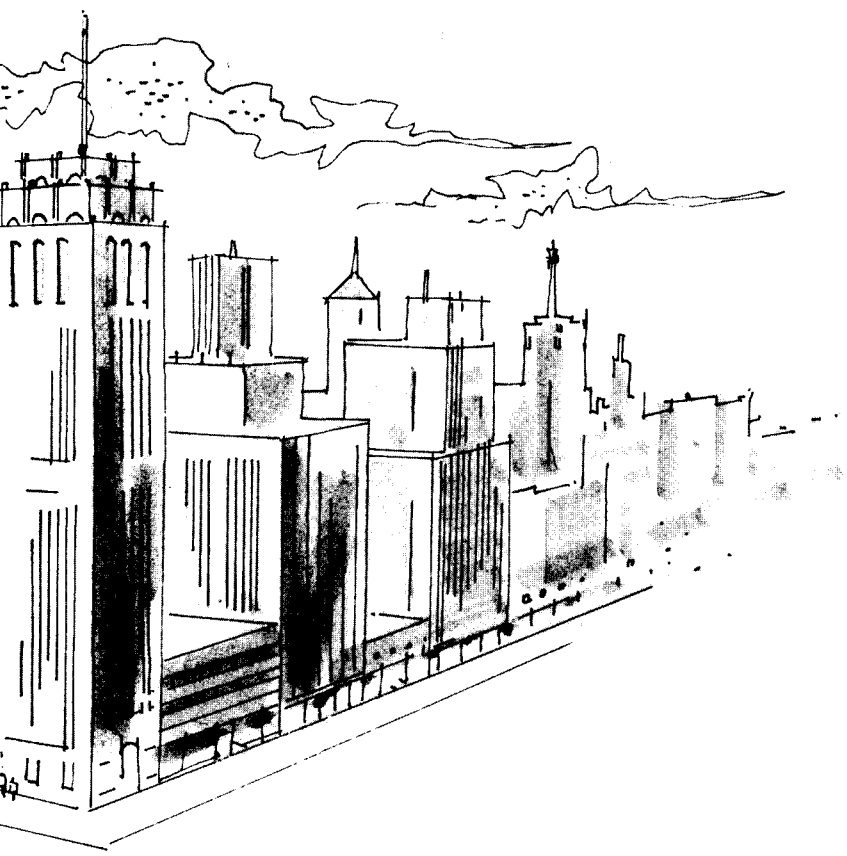


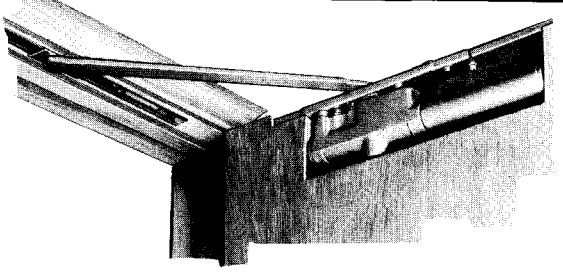


NORTON SERIES 750 CLOSERS



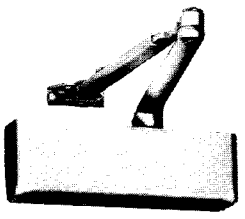
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For the beauty of complete invisibility, Series CC-900 closers mortise completely into the top rail of the door. The arms are visible only when the door is open. Units can be installed in the most esthetic indoor locations, wherever complete concealment of closer is desired.



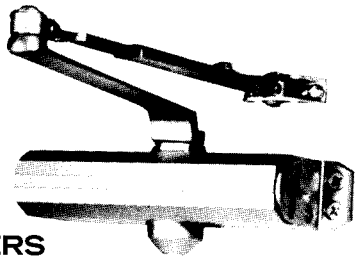
NORTON SERIES 7000 CLOSERS

For matching or contrasting with room decor. Series 7000 closers are available with covers of 67 woodgrains to perfectly match room and door woods. Covers also available in clear aluminum, bright brass, or dull bronze to match other hardware for a contrast to wooden doors.



NORTON SERIES 6100 CONTROLS

For complete door control in a single hardware installation. Series 6100 controller is a combined door closer and door holder. All five door control functions: cushions the opening of the door, stops the door, holds the door open, closes the door, and regulates door closing and latch speeds. Simplifies hardware installation for less cluttered appearance.



NORTON SERIES 1600 CLOSERS

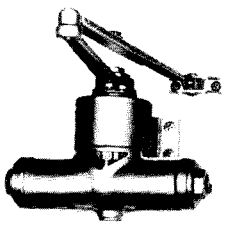
For versatility and styling for wood and metal doors. Series 1600 closers can be installed anywhere. Features three types of mounting: Invisible mounting, no screws visible; Back mounting, screws visible on back of door only; Regular mounting. Natural slim lines of Series 1600 ideal for styling of narrow aluminum doors.

.... where appearance is so important

NORTON® CLOSERS CONTROL DOORS—NOT DESIGN

Possibly, no other type of building demands styling with as much taste as commercial structures. And, where beauty is so important, the styled Norton line lets you select door control to achieve the design and decor you desire.

Your choice may range from complete invisibility to the selection of Norton closers to exactly match woodgrains or hardware finishes. Selection of a Norton closer means years of dependable control for your doors and you can choose from a wide range of door controls engineered to your specific requirements. Apartments, restaurants, offices, stores, and athletic arenas all present special door control requirements. You can fill these needs without inhibiting your design when you choose Norton Door Closers and Unitized Door Controls.



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For dependability in any location. Regular Surface closers, the workhorse of the door closer industry. Even when appearance is not paramount, these closers can be attractive in appearance and they are built to withstand extremely heavy traffic.



NORTON SERIES 750 CLOSERS

For unobtrusive beauty, Series 750 closers mount into the top head jamb. These closers present an indiscernible projection when the door is open and become almost invisible when the door is closed.

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NORTON® DOOR CLOSER DIVISION

372 Meyer Road, Bensenville, Illinois, 60106

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This engineering building is "painting" itself



The Boeing Company's Engineering Laboratory Building photographed in Nov. 1966, 13 months after erection. Architect: Leo A. Daly & Associates, Seattle. General Contractor: Peter Kiewit Sons Co., Seattle. Structural Steel: Joint venture— Pacific Car and Foundry Co., and Issacson Structural Steel.

The exposed steel in The Boeing Company's new Engineering Laboratory Building at Renton, Washington, is USS COR-TEN Steel, the steel that "paints" itself as it weathers. It develops a tight, dense oxide coating that seals out corrosion; if it is scratched, it heals itself. The longer bare COR-TEN Steel weathers, the better it looks. Nature provides its rich, earthy color and texture.

The exposed COR-TEN Steel in the building is comprised mainly of 3″ Tees and 16″-deep load-bearing columns. They frame porcelain panels on the second floor, and precast exposed aggregate concrete panels on the ground floor.

Bare USS COR-TEN High Strength Steel is a natural for eliminating maintenance and for structural use. With a minimum yield point of 50,000 psi, it is about 40% stronger than structural carbon steel. Members can be lighter, more graceful, without sacrificing strength. USS COR-TEN Steel is available in a full range of structural shapes, plates, bars, and sheets.

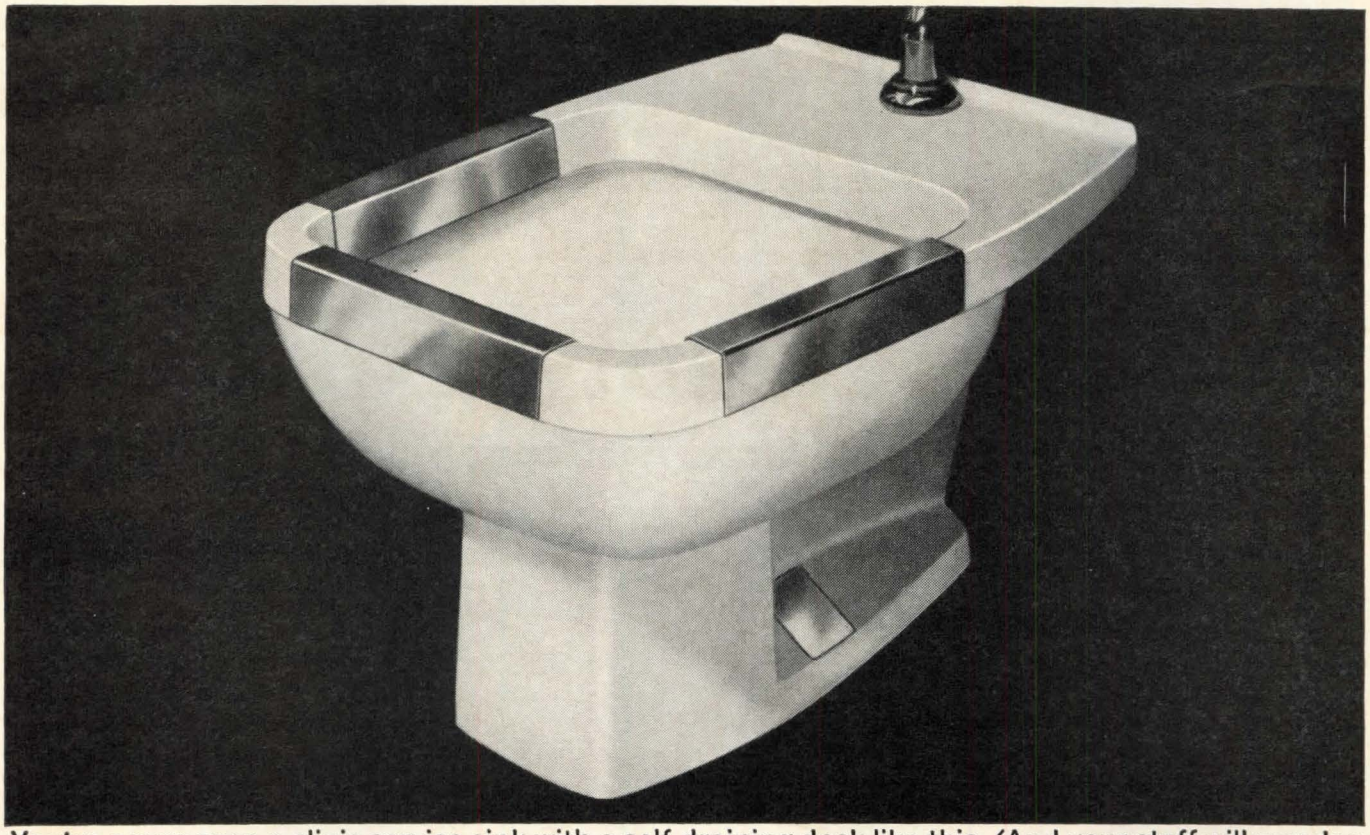
For full details on the use of COR-TEN Steel in architectural construction, contact a USS Construction Marketing Representative through the nearest USS Sales Office, or write United States Steel, Room 4630, 525 William Penn Place, Pittsburgh, Pennsylvania 15230. USS and COR-TEN are registered trademarks.

USS **United States Steel: where the big idea is innovation**

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easier to look at, use and maintain



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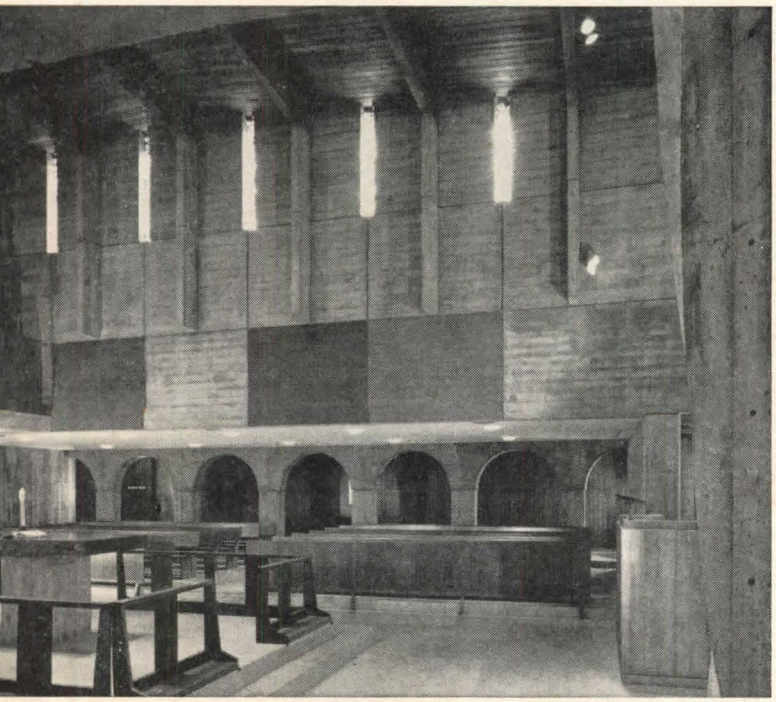
PLUMBING & HEATING DIVISION



UNIVERSITY LUTHERAN CHURCH, Lawrence, Kansas. Architect: UEL C. RAMEY, AIA of Uel C. Ramey & Jack R. Jones, Architects, Wichita; Structural Engineers: HARTWELL-BAXTER & ASSOCIATES, Wichita; General Contractor: LAWRENCE CONSTRUCTION CO., INC., Lawrence; Ready-Mixed Concrete; LAWRENCE READY MIX, INC., Lawrence; Lightweight Aggregate: BUILDEX, INC., Ottawa, Kansas

Concrete's Beauty Exposed

Monolithic Church Wins A.I.A. Architectural Design Award



Inside walls are also exposed concrete. 1 x 6 board forms were used, and the concrete surface was left unfinished.

This boldly designed structure evolved from a basic conviction: that a church building should reflect architecturally the heritage and beliefs of the faith it represents. It is one of five structures honored by the American Institute of Architect's Kansas Chapter in its 1965-66 design awards program.

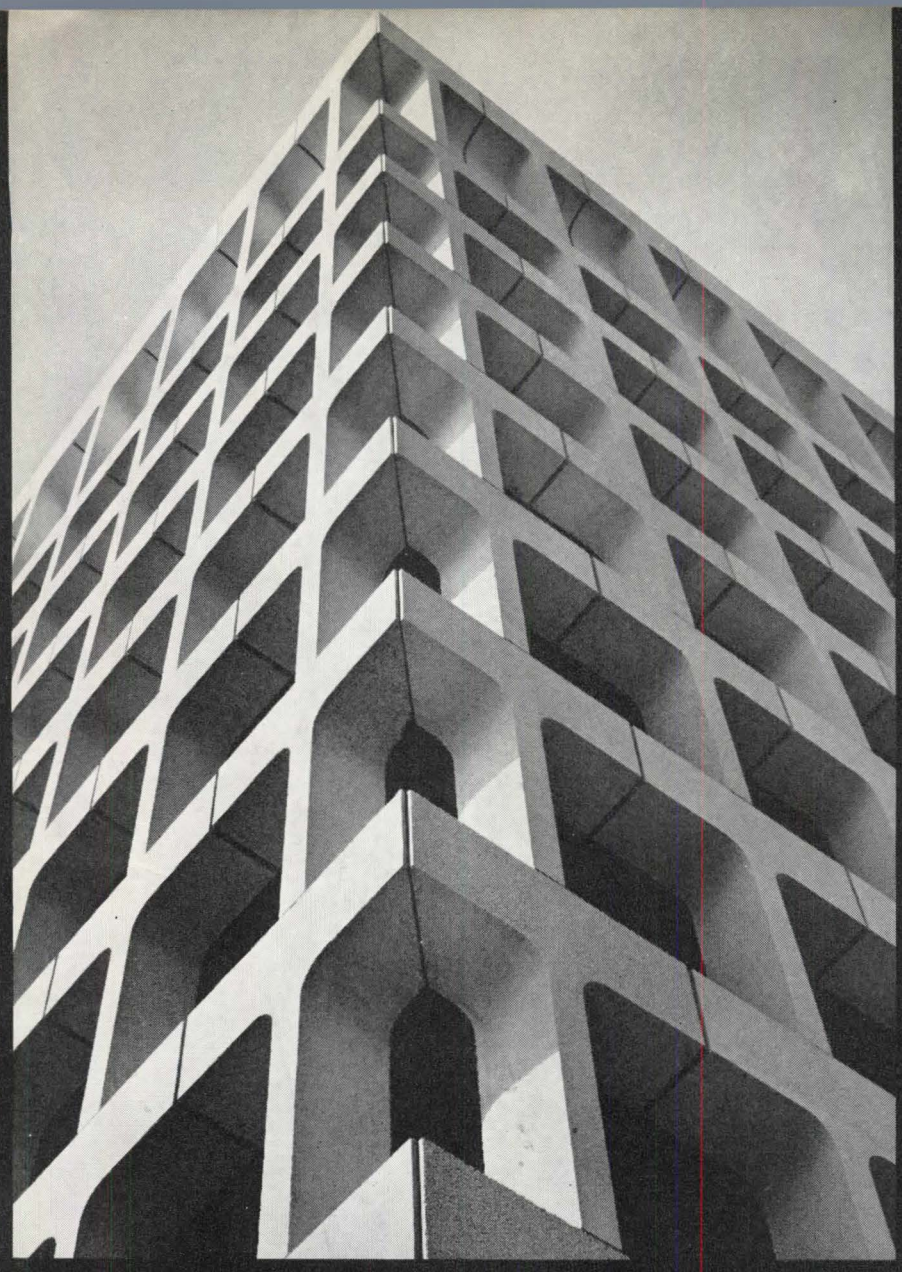
The open tower with rounded roof reminds worshippers of their ancient heritage. The exposed, unfinished concrete underlines the simplicity and strength of their faith. Form marks and ties were left showing, and tie holes were not filled. Says the architect, "We are rapidly developing a culture in which the substitute, the artificial, is more desirable than the real thing. In this building concrete is concrete."

The church is adjacent to the University of Kansas and serves the fast-growing community of students and faculty. Dependable Lone Star Portland Cement was used exclusively in its construction. Lone Star Cement Corporation, 100 Park Avenue, New York, N.Y. 10017.

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ENTRANCES & STORE FRONTS

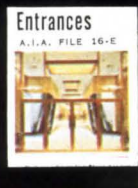


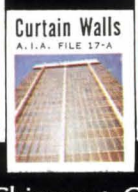
First National Bank, Atlanta, Georgia; Contractor: J. A. Jones Construction Company; Architects: Stevens and Wilkinson Architects and Engineers;

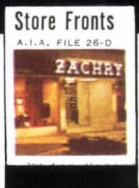
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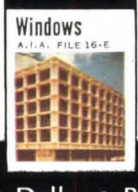


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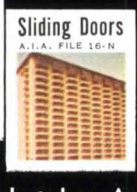












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Dalton·Dalton Associates plan a Neighborhood Renascence



for an 80-year-old urban residential area

It was a project commissioned by the 1967 Cleveland Home and Flower Show and Cleveland Chapter of AIA to demonstrate how old homes in urban localities can be remodeled to attract new middle class residents as older persons depart.

A group of six homes on the near west side of Cleveland was selected—a neighborhood developed long before the automobile was

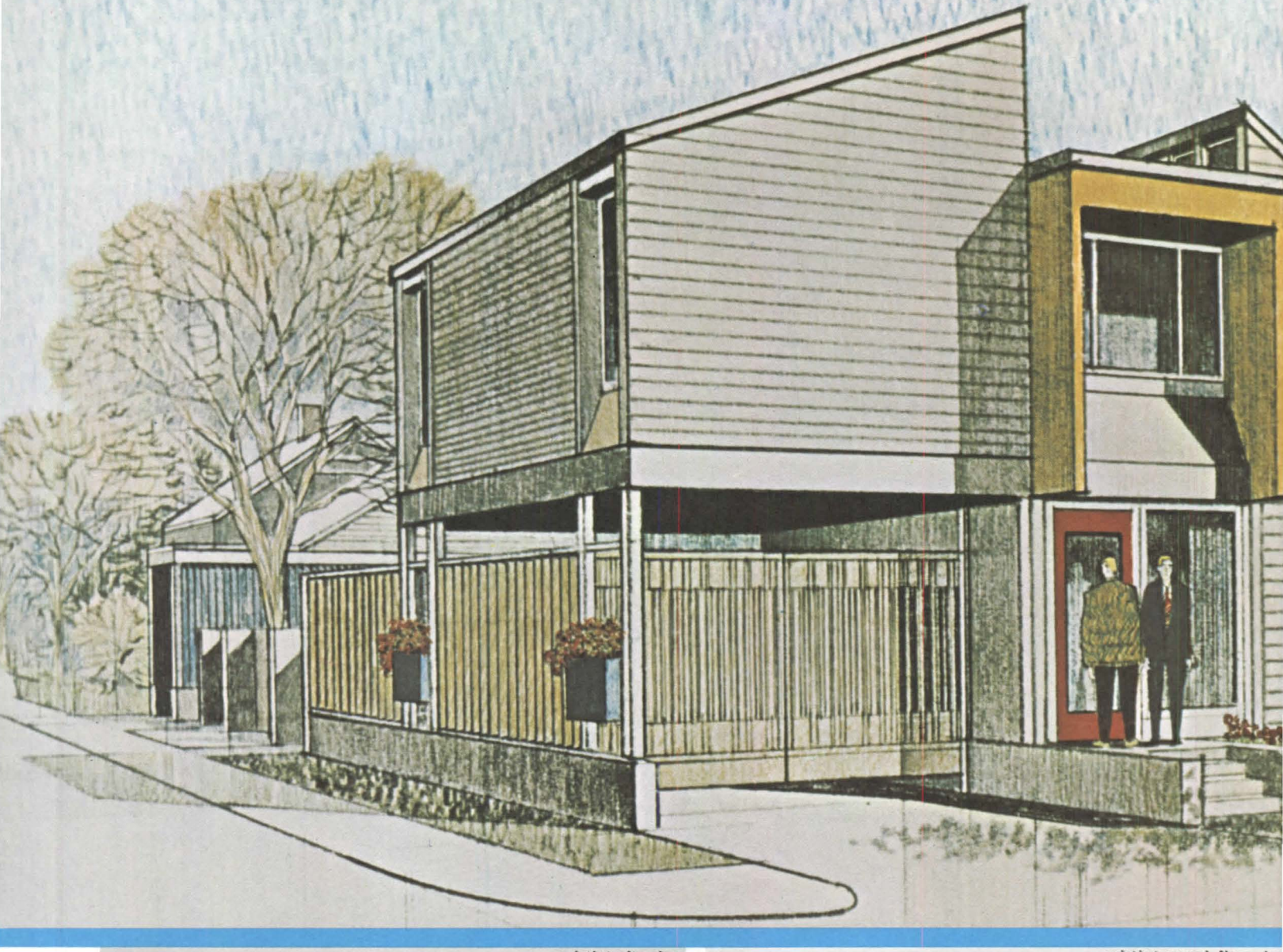


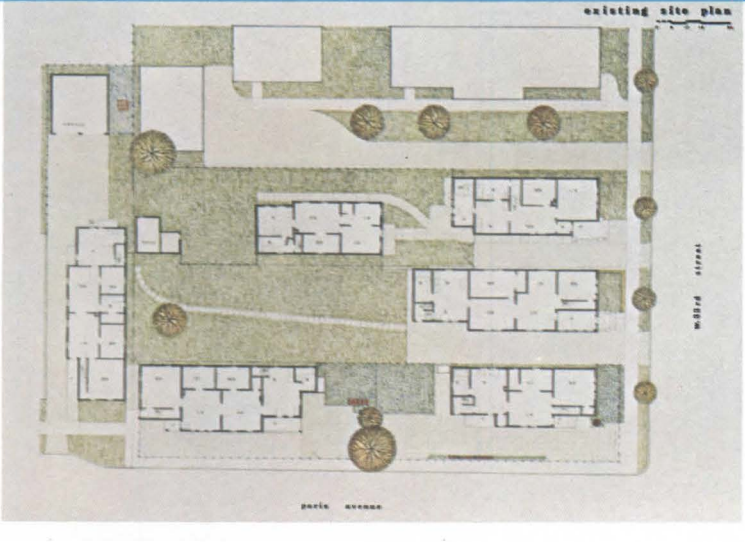


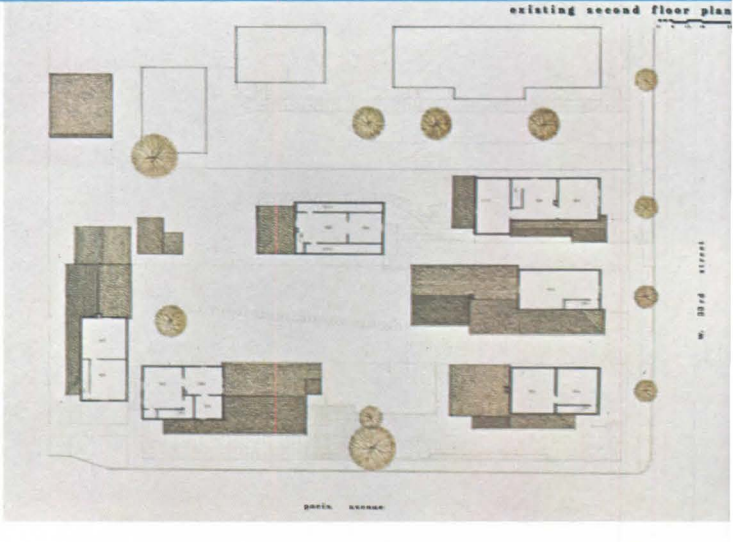
invented. But the aged houses were well maintained and worthy of renovation.

Three full-scale walk-through homes, plus three two-story facades of the homes as they would be remodeled, were constructed in the Cleveland Public Auditorium.

Norman Perttula, Director of Design for Dalton · Dalton Associates, Cleveland, *revised the homes* externally so that they surround a commons, facing in to each other as well as out to the street, because o





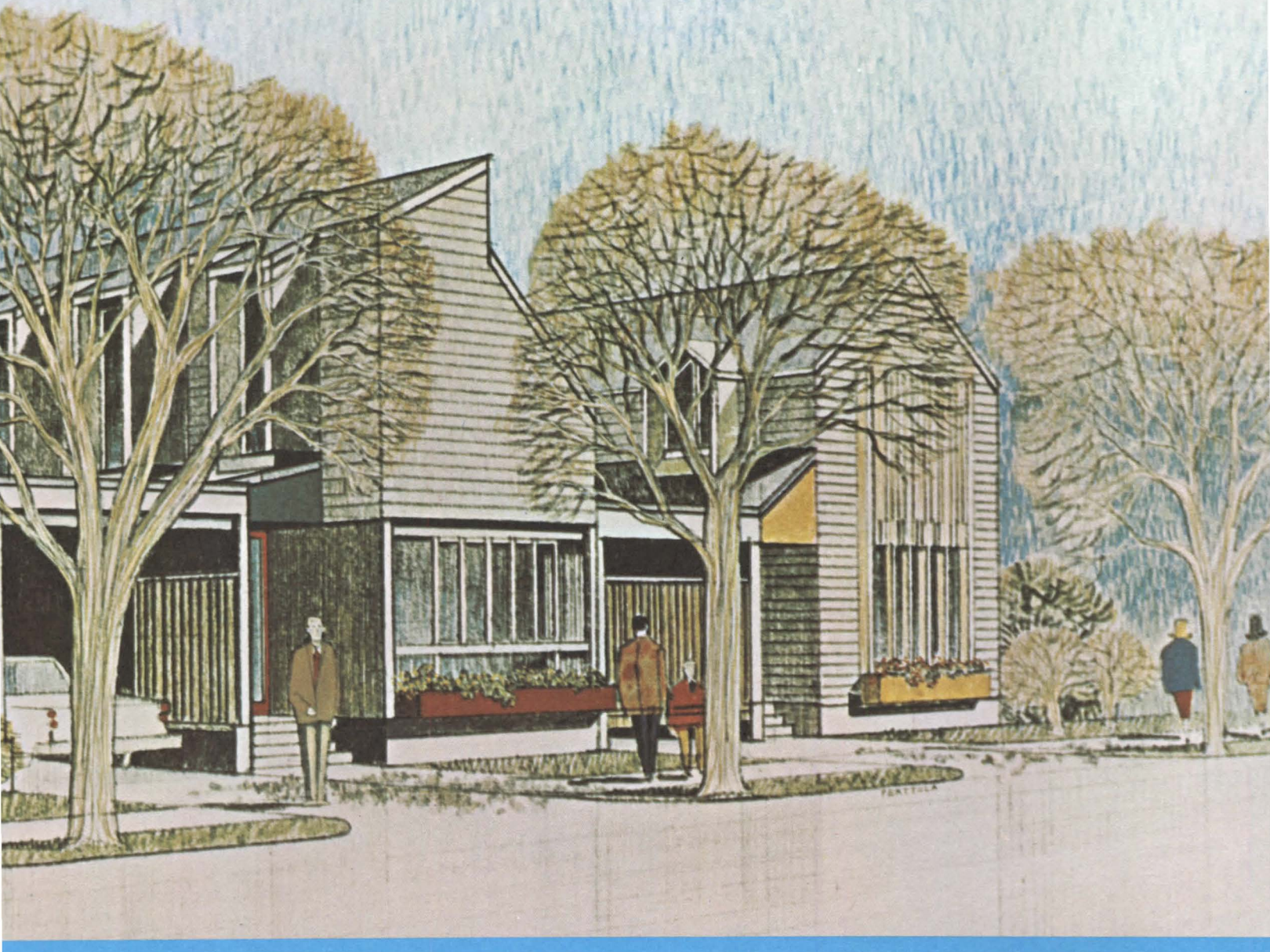


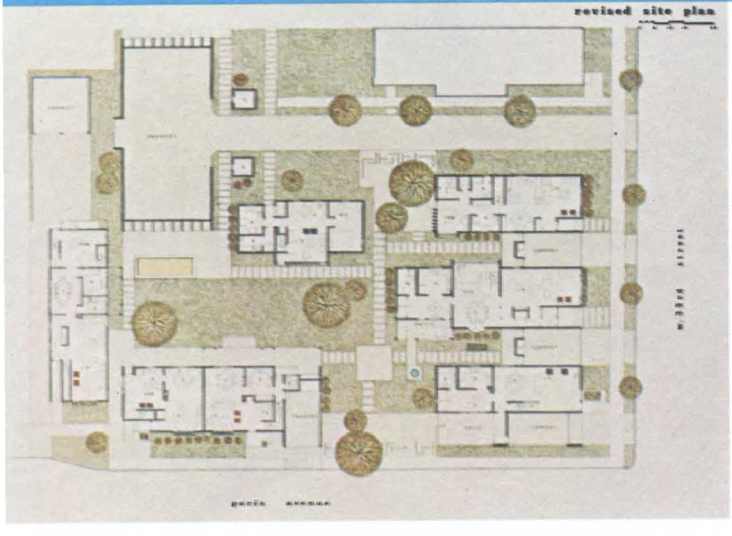
commercial and industrial zoning in the area.

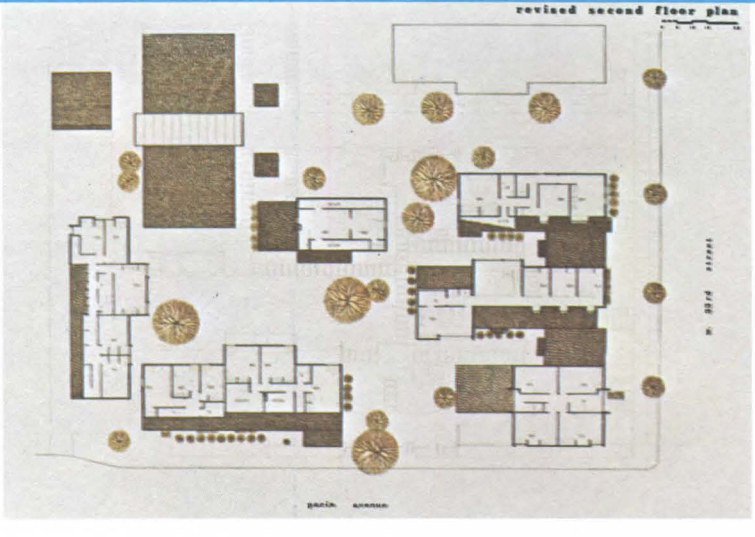
Carports and garden or patio space were provided in place of concrete driveways to provide more privacy for each home. Wherever possible, existing walls were kept, but the interiors were rearranged for pleasanter family living and to provide traffic patterns more compatible with today's mode of living. Glass was used generously to merge the rooms with the park-like commons and to make homes more contemporary. Thermopane® insulating glass or polished plate glass in large window areas. Tempered plate glass in sliding patio doors. And single- or double-strength window glass in second-story or third-floor windows.

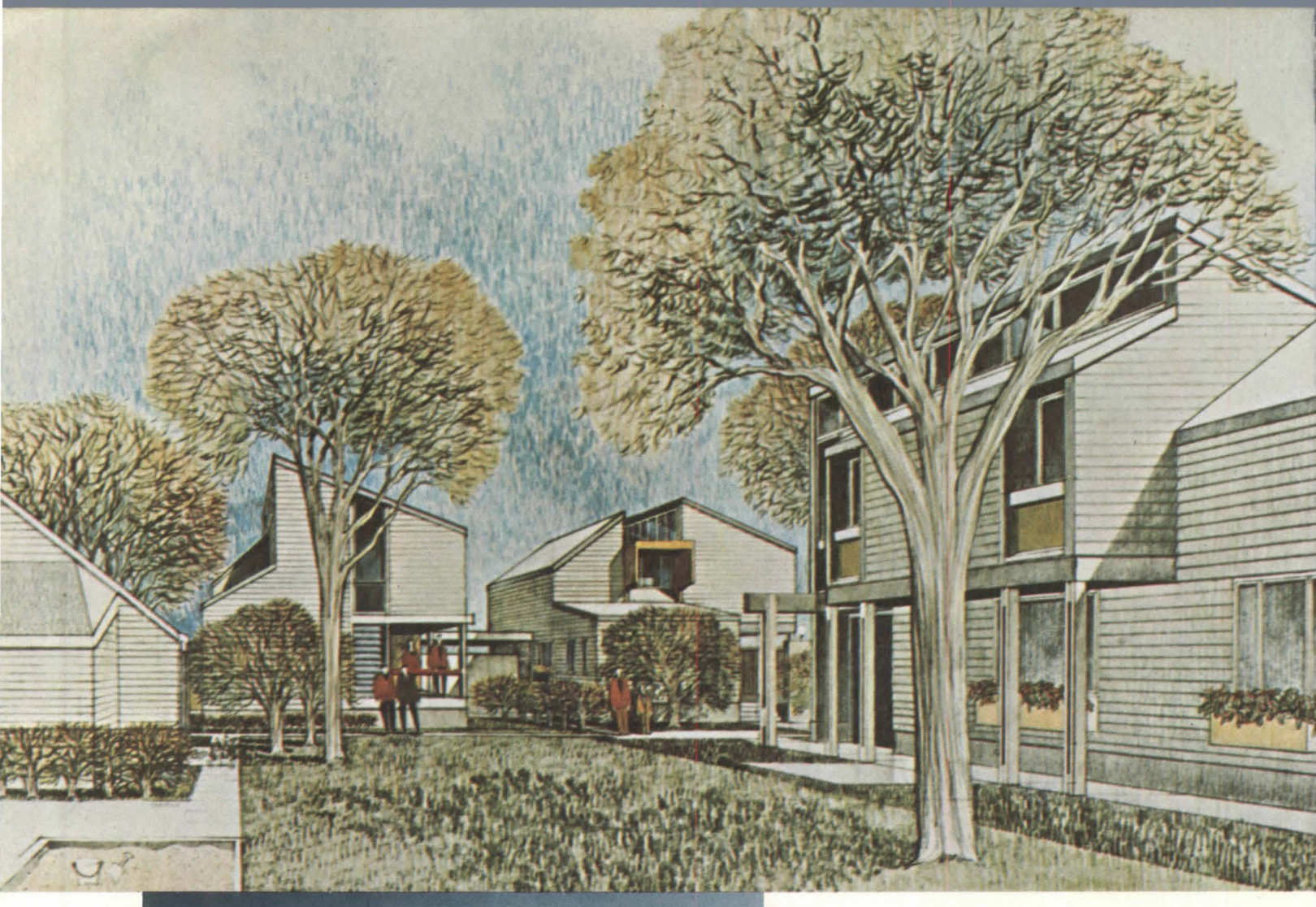
One of the walk-throughs had a dropped roof with a clerestory to provide more light in the home. This dwelling was redesigned to have four bedrooms instead of three.

Another home, featuring a two-story beamed ceiling and an upstairs balcony, had three dormitory-style bedrooms and a spacious master bedroom.











The third walk-through was a duplex remodeled from a single-family dwelling. Each suite featured three bedrooms.

In all cases, Mr. Perttula introduced more daylight and air simply by enlarging existing windows, adding patio sliding doors and sometimes a clerestory.

It all demonstrates the vast potential ordinary structures have for rebirth and extended usefulness. L·O·F makes a particular kind of glass for every purpose in Open World design. Refer to Sweet's Architectural File or call your L·O·F Glass Distributor listed under "Glass" in the Yellow Pages. Or write to Libbey·Owens Ford Glass Company, 811 Madison Avenue, Toledo, Ohio 43624.

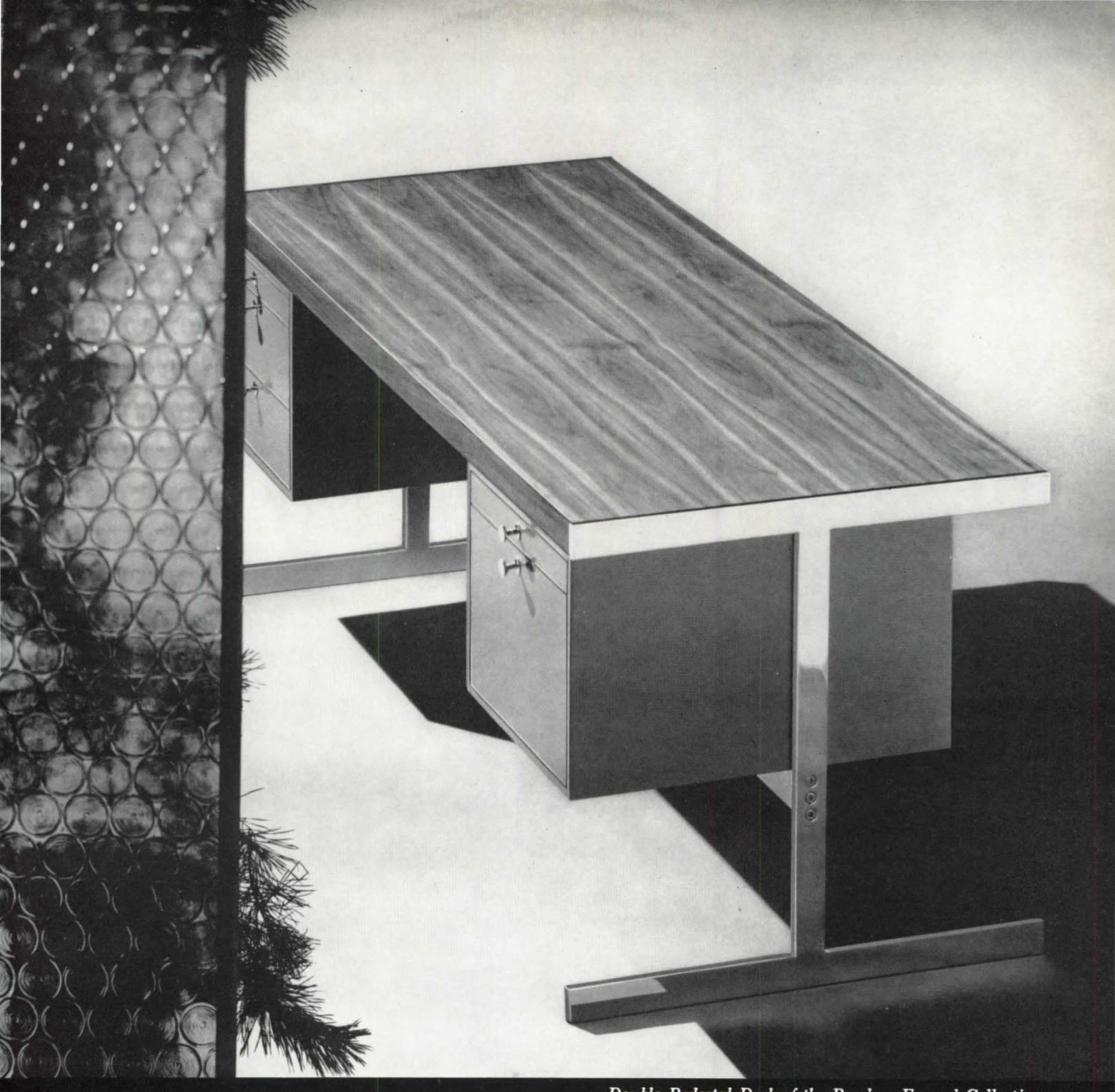
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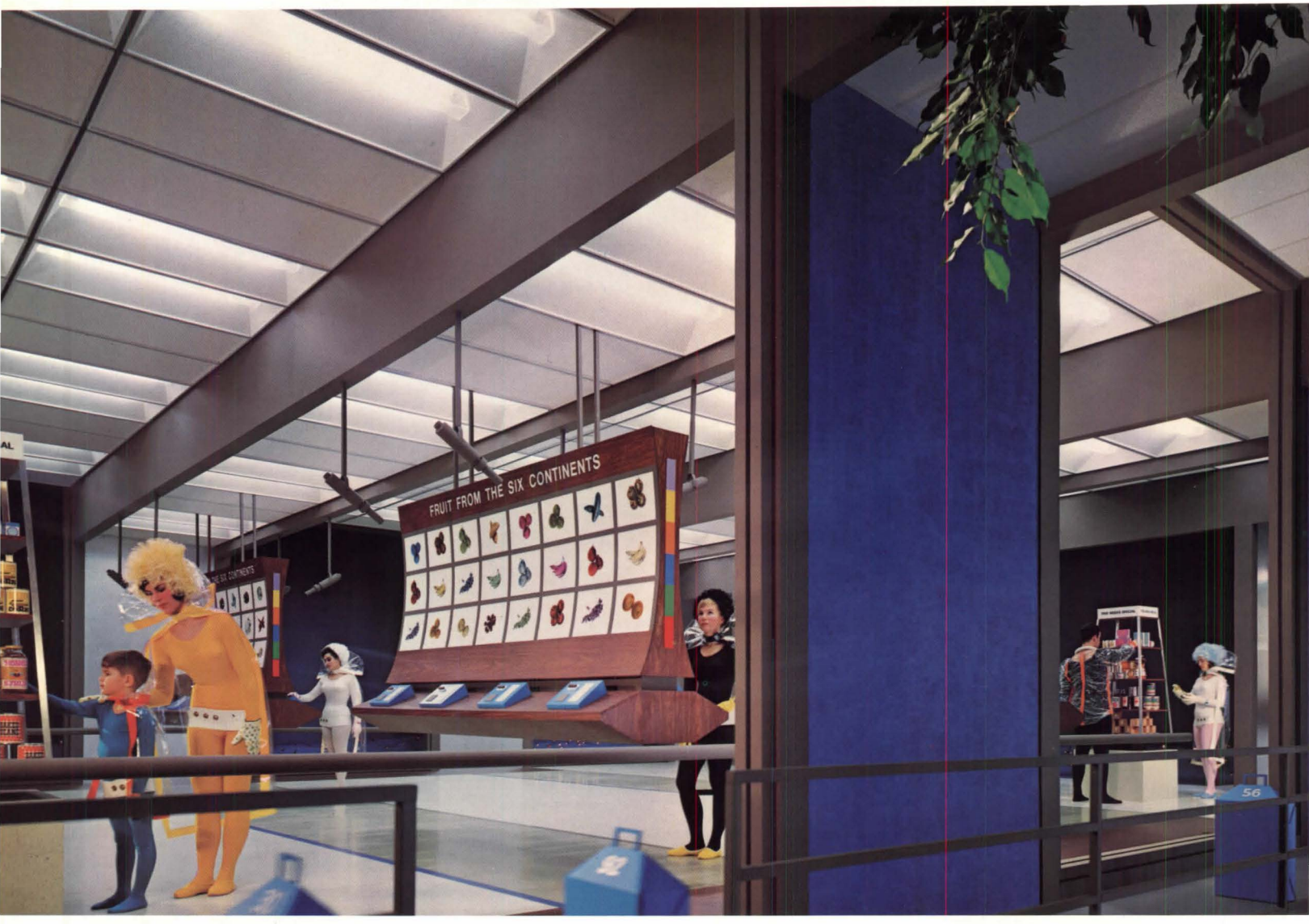
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FORUM

On June 6, 1967 (the 23rd anniversary of D-day), our longtime friend, fellow-editor, and contributor, Walter McQuade, was sworn in at New York's City Hall as a member of Mayor Lindsay's City Planning Commission. The ceremony was totally in character: like a battlefield promotion, and accompanied by the sounds of war. But since this was Fun City, the affair also managed to be thoroughly entertaining.

To be permitted to reach John Lindsay's seat of power, where McQuade was about to receive the mayor's blessings, one had to pass through chinks in barricades erected by battalions of NYC police, who had been deployed along City Hall's defense perimeter when there were rumors of an impending assault upon Ft. Lindsay by waves of starving (and, hence, disgruntled) landlords. (The disgruntled landlords, like all landlords, overslept.)

Having been frisked and identified by the mayor's bodyguard, one entered Ft. Lindsay to find assorted McQuade friends and relatives waiting. However, no McQuade. (He is very nonchalant about deadlines.) Finally, at 11 A.M. precisely, McQuade walked in, clutching a prepared statement. Eleven A.M. was when the mayor expected to have him say "I do."

McQuade having arrived, the ceremonies got under way. The place was the mayor's private office, and it was filled to the rafters with CBS, NBC, ABC, and several representatives of pirate TV and radio stations. The mayor looked dashing, McQuade looked a trifle pale, and the media men kept shouting "Make way for the press—everybody else get out!"

The mayor, rather relaxed, decided that *Mrs.* McQuade and her three offspring were much more interesting than Walter—and so he concentrated on them. The media proceeded to concentrate on John Lindsay. Outside, the cops started to man their battle stations.

Then Mayor Lindsay rose to his full height (about 15 ft.) and said some intelligent things about the improved quality of urban design he would like to see around the city, and that this was why he was about to make Walter a city planning commissioner. We applauded, and the mayor said: "I am going to swear you in now, Walter—are you ready?" McQuade said "yes."

At this point everything went beautifully wrong: a very young voice piped up from behind the mayor, precisely and audibly, *"I'm* not ready!" The voice belonged to Kate McQuade, age 4, and she was swiftly shushed by Mrs. McQuade—but not for long. After Walter had sworn "I do," His Honor picked up Kate and asked her advice on some of the more pressing problems of NYC. *"Now* I'm ready," Kate said. McQuade, still clutching his statement, was by then trying unsuccessfully to explain why he had agreed to serve. "This city has us by the imagination," he said. Kate, now in the *real* seat of power (the mayor's lap), gave her father a withering look, and continued to tell John Lindsay how to deal with the landlords outside.

When it was all over, we sneaked out through the escape hatch in the barricades and went off for lunch. Mayor John Lindsay stayed behind, possibly wondering whether or not he had picked the right McQuade.



eight hand-held movie projectors, eight hand-held slide projectors, and one overhead projector, Vanderbeek, jumping all over the place, let go with a barrage of images aimed at screens, dancing girls, ceilings, and the tent itself. Spectacular! Score: unchanged.

FRIDAY. The Orderlies finally managed to pull even—through no fault of their own. That morning, Dr. Jacob Bronowski gave a one-hour summation of what the conference might have been.

His point was that randomness is not man's method of creating anything. Although Eddington had once written that if you put a monkey behind a typewriter he would, eventually, type out the entire works of Shakespeare, Bronowski demonstrated that this was mathematically impossible: taking the first line of Shakespeare's sonnet—"Shall I compare thee to a summer's day"—Bronowski figured out that the monkey would require 25 million years to get as far as "Shall I compare thee to a su"—by which time the monkey would long be extinct and, perhaps, mercifully so. Bronowski agreed with Hein on the matter of problem-solving; but insisted that man's way was no hit-or-miss process.

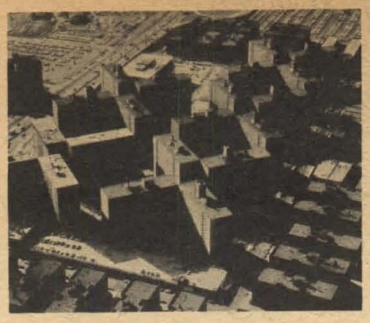
The audience gave Bronowski a standing ovation; some Italian students gave Craig Ellwood, the program chairman, a bunch of plastic mountain flowers (Shahn had complained that the planners had forgotten to incorporate mountain flowers in their scheme of things); outside, the Lindsay men were reassembling their kite for the umpteenth time, got it some 20 ft. up in the air, saw it crash one final time and, with yells of dismay, jumped on the wreckage and trampled it into the ground.

Nearby, a little boy stood in the meadow holding a string with a simple, rational, 15¢ kite which soared serenely some 200 ft. up in the Aspen sky. The great Bronowski and the little boy had evened the score.

UPS & DOWNS

POSTGRADUATE COURSE

The United Nations Economic Commission for Europe recently sponsored a session of the Committee on Housing, Building and Planning (the 28th of its kind) in Geneva. Housing experts from 25 nations convened for the three-



day conference. Among the members of the U.S. delegation were Stanley E. Smigel, international economic adviser to HUD; James A. Moore, director of international affairs for HUD; and Samuel J. Lefrak, president of the Lefrak Organization.

Mr. Lefrak, of course, is the creator of Lefrak City (above), one of the more appalling piles of brickwork put up anywhere during the past 20 years. It is good to know that the U.S. Government sends Mr. Lefrak on missions such as this one; for while he may not be entirely qualified to make any major contributions to plans for future European housing, building, and planning, he might, just possibly, have picked up an idea or two from representatives of one (or all) of the other 24 nations in attendance.

[redacted]REJECTS

A MATTER OF SCALE

One thing seems certain about Washington's Fine Arts Commission: it is nobody's handmaiden. On June 21, it even slapped down the design for the American Institute of Architects' own headquarters building—a design that had been unanimously approved just a month before by the national AIA convention in New York City (June issue).

The commission pulled no punches in the course of rejecting the design by Mitchell/Giurgola Associates. Commission member Gordon Bunshaft called the eight-story scheme "totally out of scale with the existing buildings on the site" (the three-story, Georgian-style Octagon House and an outlying smokehouse). He added: "This new building would make the existing buildings and garden look like a toy. It doesn't belong in this place."

Ironically, the AIA had gone to a great deal of trouble in the interest of appropriate scale. An earlier scheme, with which Mitchell/Giurgola had won a national

(continued on page 107)

ARCHITECTURE ON THE CAMPUS

What do campus buildings do to and for those who use them?
What do students do to and for the buildings in which they live and learn?
What does a campus do to the community in which it is located?
What is the quality of the most recent architecture on the U.S. campus?

Some of the answers to these and other questions may be found in the six case histories that make up most of this issue. The case histories were taken from the campuses of Yale, Princeton, Lake Erie, Columbia, Duquesne, and Berkeley; and they range in scope from the kind of furniture a student needs to live happily in his dorm, to the kind of attitude a great urban university needs to live happily with its neighbors.

YALE

a building as a teacher



THE CHANGES

When Paul Rudolph's Art & Architecture Building at Yale opened late in 1963, the fanfare that was specially composed for the dedication was only the beginning of the fanfare that resounded through the architectural world.

After the elaborate praise in the magazines (FORUM, April '64), came some criticism. But didn't the exhilaration of the spatial experience override mundane problems, it was argued.

More recent word from New Haven suggested that the building—while still great—might be something of a disaster in practical terms. Charles Moore, Rudolph's replacement as chairman of the architecture department, looks at it this way: "It's a magnificent building, with fatal flaws," he said recently, "which is much better than a good building with minor flaws."

Intrigued, and not wanting to wait the ten-year minimum for an official return visit, we returned to the A & A Building for a live-in and a speak-out.

Much has changed about the building, and much cannot be changed. The most striking change has occurred on the floor of the architecture settlement (opposite)—striking, that is, to those who remember the careful rows of carefully designed drafting tables when the building opened (below left). Today it is a *favella*, a spontaneous shantytown that changes with the years as new students bring their talents and needs to this unassigned design problem.

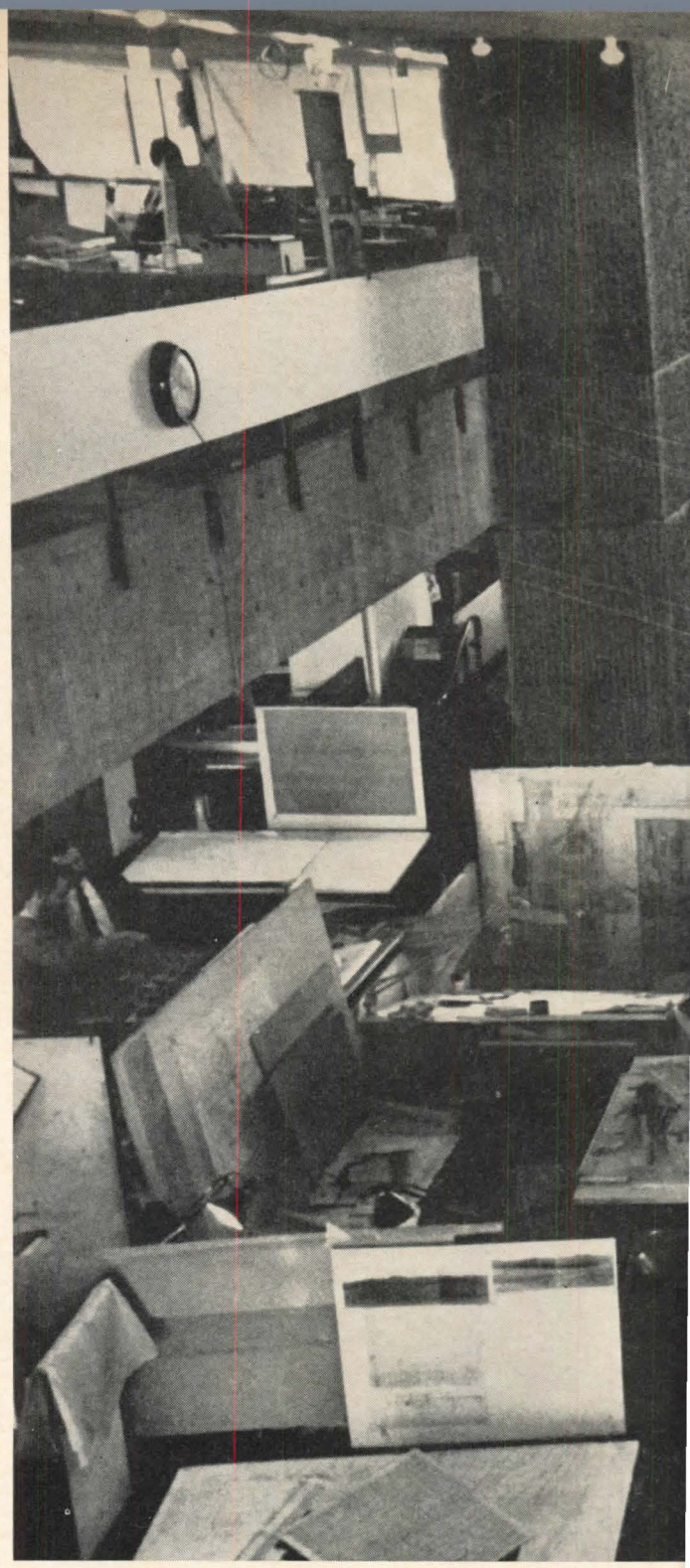
The structures are flimsy or solid, straightforward or whimsical, modest or grandiose. Last year, a student built a two-story office for himself; next year may see a totally new answer to the special requirements of function (a place to hang your drawings, as well as your hat), of privacy (a place to shut out neighbors), and of ego (a place to express your own personality, perhaps with a sense of competition, or a surge of territoriality, or a need for homeliness—or whatever makes us build as we do).

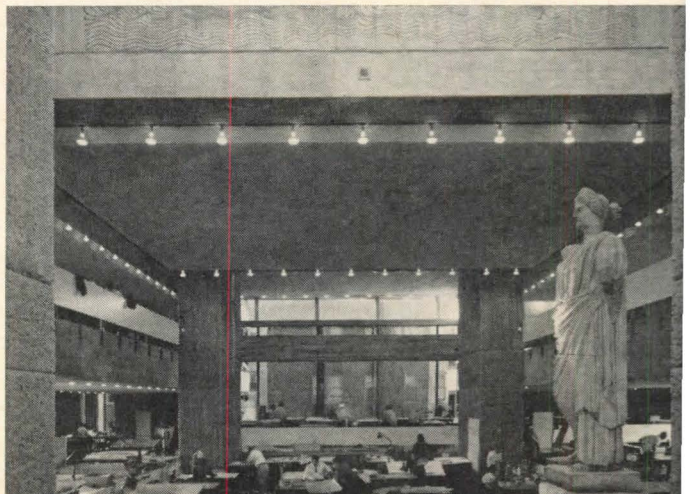
Another major transformation has taken place, but by intention, at the penthouse. After a number of visiting dignitaries had complained about elevator noise intruding on the elegance of the guest suite (below center), it was proposed to change the area into a coffeehouse (below right). This is so successful as a meeting place that at least two professors now claim the idea as their own, and the operation earns several thousand a year for the student loan fund. It provides almost the only meeting place between students of different departments, and an ironic after-the-fact justification for their being in the same building in the first place. The previously designated lounge on the exhibition floor has not worked satisfactorily as a meeting place.

The ways in which the building has—or hasn't—adapted to the life within it are indeed instructive. But the strong impact the building makes on students —the involvement it demands, the violence it evokes, the irritant and stimulus it provides—make this building an unusual one for education. It has a dimension today that it lacked when it was neat and new. Then it was only a three-dimensional piece of theoretically habitable sculpture. Today, it is lived-in, talked about, hated, written on, delighted in, with an involvement that is perhaps the real success of a building that also has many aspects of failure.

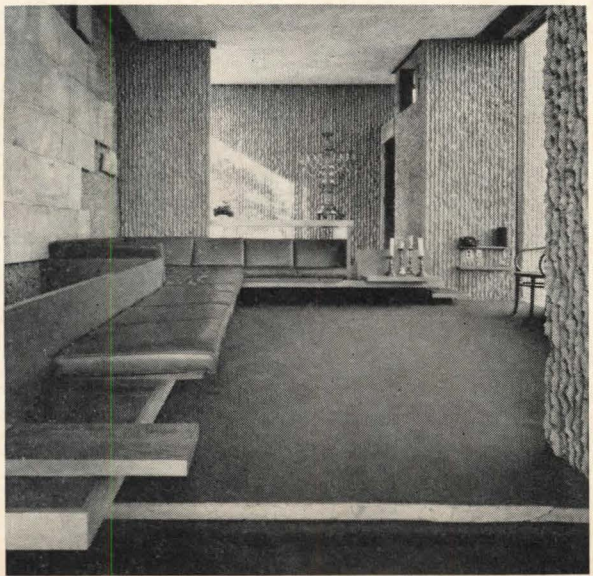
The building still stands out as a place of distinction. Some students call it the Rudiberger; and one student tells of the visitor driving by who asked if it was the Holiday Inn.

But inside, it is unquestionably one of the most stimulating environments for the study of environment. Whether this results more from the people or the building, no one can say. It is simply apparent that the people here are involved, connected, related—to their work, to each other. If the building has anything to do with this, the achievement may well balance out the dirt that can no longer be swept under the now shabby orange carpets.





Before and after photographs show the striking change on the architecture floor from the orderly arrangement of drafting tables when the building opened (left), to the anarchic arrangement of today (above). Students build without rules and restrictions—one student working on a large model had simply carved out the largest space for himself, and most students defy a few structural rules. Another change from before is at the penthouse, which was an elegant guest suite four years ago (right). Overnight visitors were unhappy about the noise of the elevator, and the place is now a lively coffeehouse (far right).





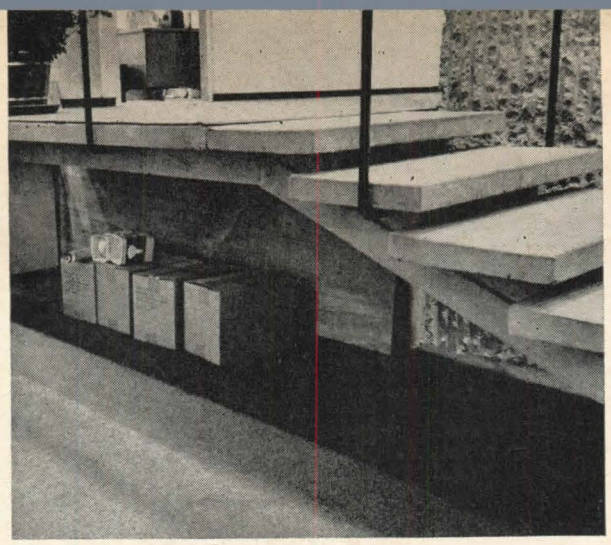
THE CONDITION

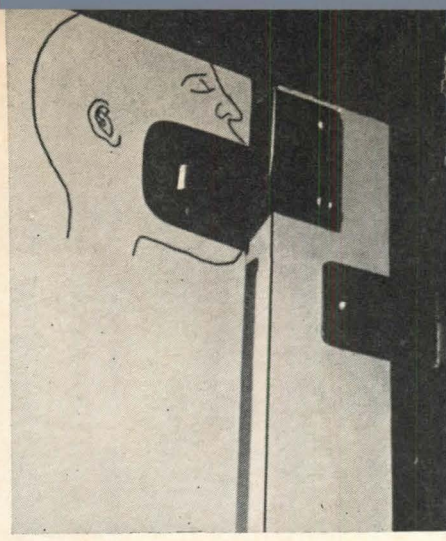
The building at once seems sloppier, more casual, than when the carpets were new. (Some carpets have been replaced by brown or beige; Rudolph says he would still choose the original color, but should have chosen a better quality.) It isn't so much a deterioration about the place—everything seems older than its four years—but a wearing down to a shabbiness beyond which it is unlikely to deteriorate further.

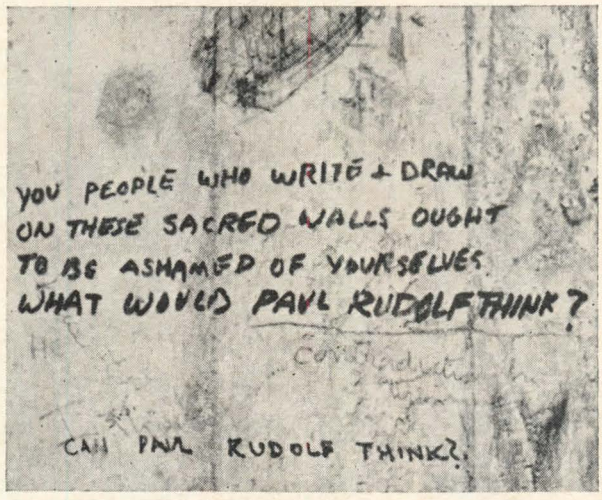
The windows are in an advanced state of filth, not having been cleaned since they were installed. Window cleaning would require a scaffolding estimated at $2,200, says the administration, and they are not about to spend money for it. Actually, says Rudolph, the intention was to use a rope system over the parapets, but he concedes that the jogs in the building's exterior make this difficult. Breakage and replacement are no answers, either—one large replacement had to be lifted to an upper floor on the tops of two elevator cabs, which luckily ascended in tandem.

Exposed concrete walls that, four years ago, were fresh from the vertical formboards are now plastered with graffiti. It is as if the existing wall surfaces were unfinished, the way the scratch coat of a plaster wall receives various directions, artwork, comments. But in this case, the messages *are* the wall finishes.

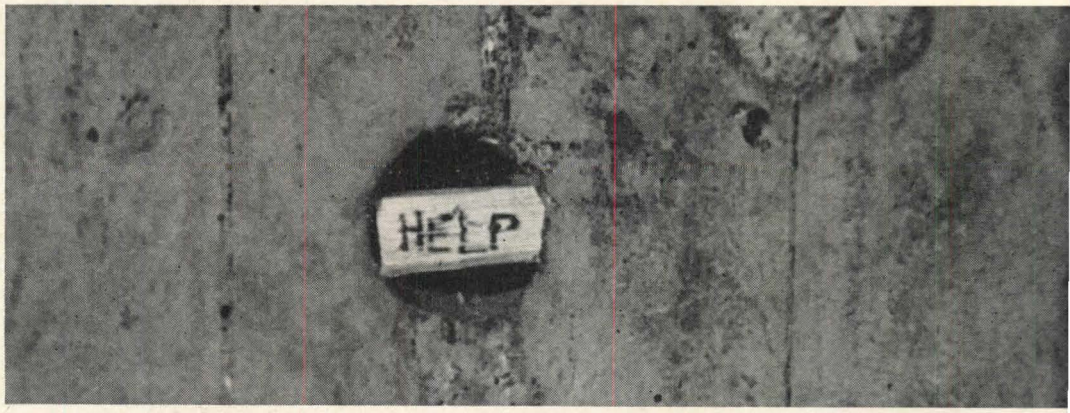
The relatively smooth surfaces left by the vertical forming seem the most popular, although there are also shy graffiti occasionally penned in the vertical ribbing of the concrete corduroy. Most popular places are the usual ones—bathrooms, stair towers, elevator lobbies—plus a few unusual ones (a *derogatory* comment about the building appears, for instance, under one armpit of the Leonardo figure). The messages are not all verbal: the Minerva's eyes are "blunked out" like Little Orphan Annie, and cigarettes are stuffed into the holes left by the anchors of the formwork.

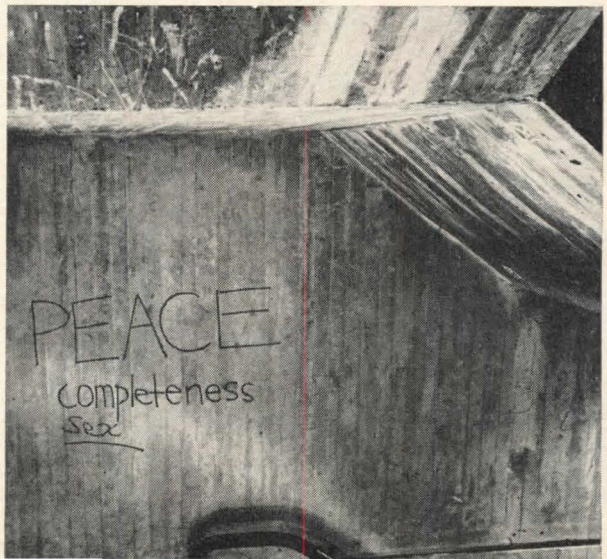


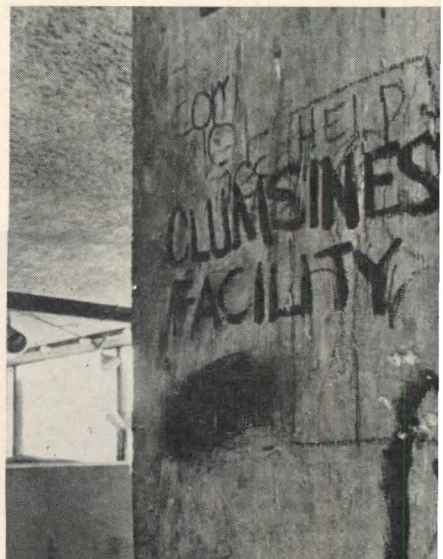




The condition of the building is a shock to some, simply a sign of life to others. The carpets have been changed from orange to brown in some areas, and under-the-stairs storage (top left) is another sign of the loss of an earlier esthetic purity. Graffiti is everywhere, not only in bathrooms (top right, a toilet partition; left, a wall), but on corridor walls (below), stair walls (bottom left) and studio walls (bottom right). Opposite are three studio areas: the painters' airless cubbyholes on the top floor (top), the sculptors' workshop, where the space under the monitor is prized for its height (center), and the low-ceilinged balcony (bottom) overlooking the main drafting area.







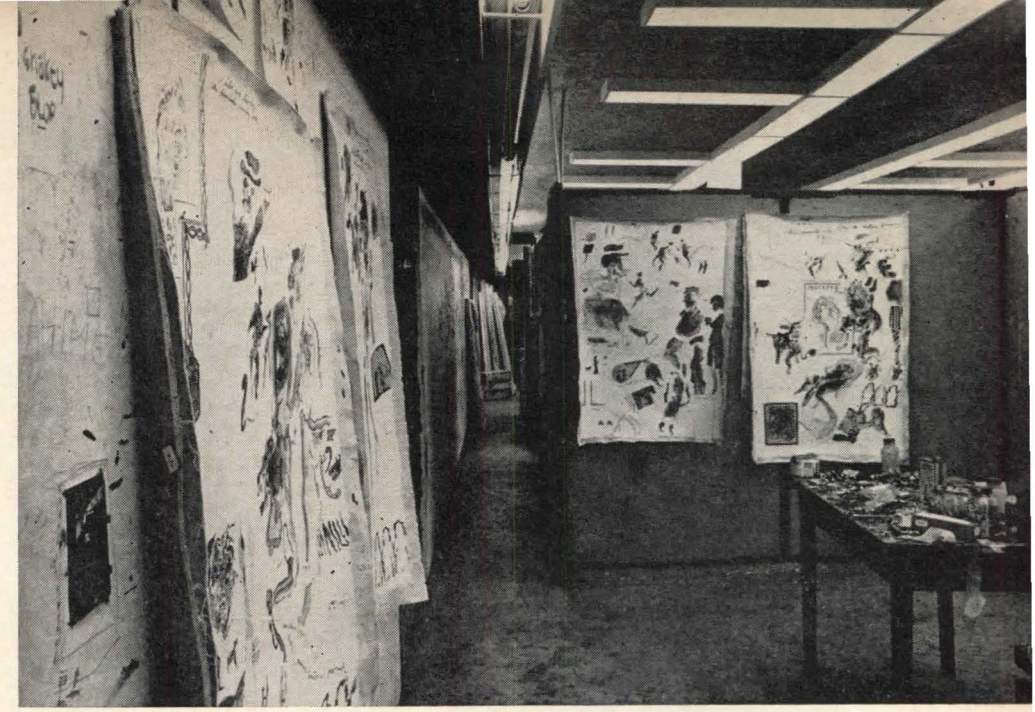
THE COMPLAINTS

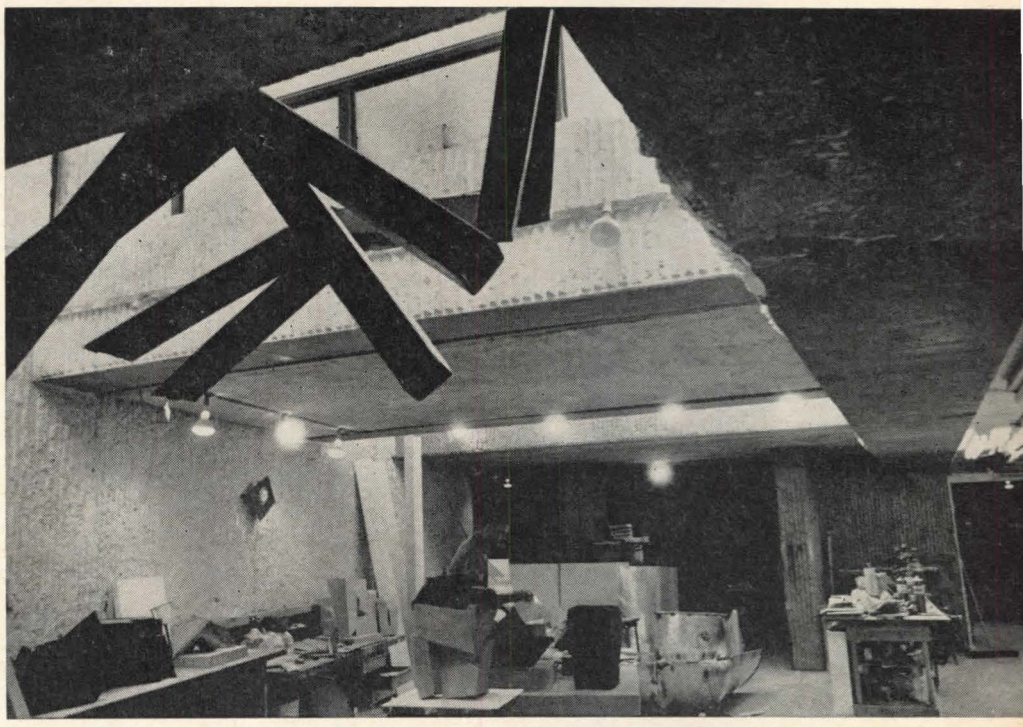
But some things can't be changed, and the list of complaints goes from the top of the building to the bottom. (If the air conditioning had been installed as planned, however, several complaints would disappear. The cost of installing it now is estimated at $150,000.)

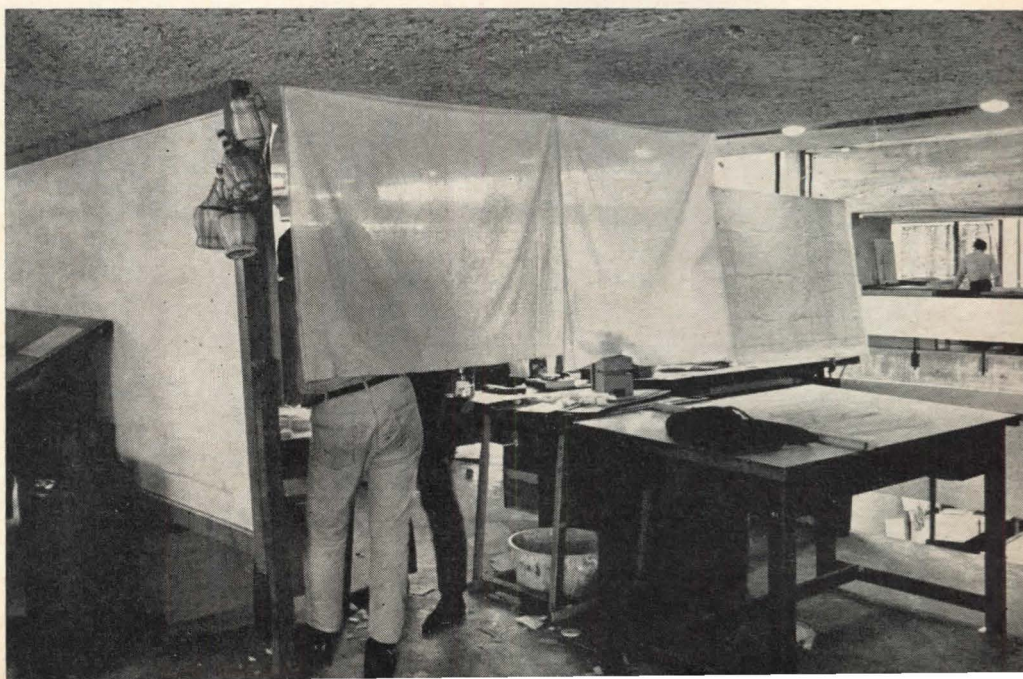
Many complaints are by department, and are a function of its special space and equipment. Painters, for instance, are on the top two floors, in airless warrens that seem to operate largely as storage cubbyholes. Complaints are basic—an overlighted studio on the east (it was originally for drawing, not for painting); a limitation on the size of paintings (7 by 7 ft. or 6 by 8 ft. is the largest canvas that can fit into the elevator—anything larger has to be taken off its stretchers); the constantly crumbling ceiling of acoustical plaster that falls into fresh work (a criticism common throughout the building).

The painters prefer to be away from the building completely; some are selected by lot for the university-owned building on Temple Street, and some work at home. There is a movement afoot to get an entirely separate building for all the painters. Their space in the A & A Building, according to one student, is typical of Yale's attitude towards its artists. "They want something for us, but don't know what. No artist could have seen these plans." The art faculty were involved, of course, in the planning, but even they were unprepared for the vehement reaction of the students.

Architects, on the two floors just below, have *other* complaints. Drafting room noise is a problem that the most elaborate *favella* cannot change. One student solves it by plugging himself (by the earphones) into his hi-fi; many others work at home. Rudolph thrives on openness (his New York office is fully open), and although he admits that some may not work best this way, he thinks that the net result is all to the good.







Lighting has been a problem in the drafting room. Students remove the reflector bulbs (to reduce heat from them, or simply to use them at home), but this lighting was not satisfactory in any case, according to a recent article in *Illuminating Engineering*. The original intention, says Rudolph, was never to rely solely on the reflectors at work areas.

The other large space, the exhibition hall, is not popular. Painters don't like to exhibit here, citing "overpowering architecture," bad illumination, and the difficulty of hanging work against the ribbed walls. The most successful exhibitions have been three-dimensional and space-filling—one on banners, another on Kiesler's sculpture.

The jury pit, too, has not realized its potential—as a fluid space where students could wander in and out. The soundproof ceiling makes it difficult to hear jurors unless they are given to excessive histrionics. There is also conflict with the typing noise from the administrative floor above, which is open to this floor. Large juries are now held in the auditorium.

In the basement, some of the same criticism is raised. In the graphic design quarters, lighting (again by reflectors) was so inadequate that a new fluorescent strip was installed down the length of the low-ceilinged studio. "We have a tremendous advantage, though, with the only opening windows in the building," says a professor.

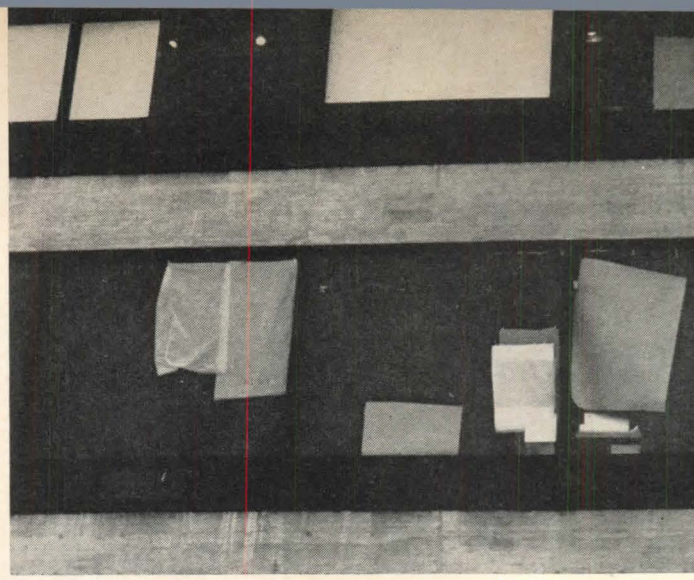
The printmaking studio has little direct daylight, but to some extent the situation has been improved by painting the rough concrete white, so as to gain the full benefit of reflected daylight. The lack of sufficient air remains a problem in a studio with pungent materials.

But the sculptors, in the subbasement, are the true stepchildren. Some 17 tons of material were delivered to their studios in the first year, but they only got a freight elevator this spring. (It was one of the items cut from the original design to save money.) The foundry has had such inadequate ventilation that a blue haze hangs over the area while it is operating, making it virtually impossible to work here at the same time. (A foundry was not part of the original program.) The present solution is an exhaust fan in the open elevator.

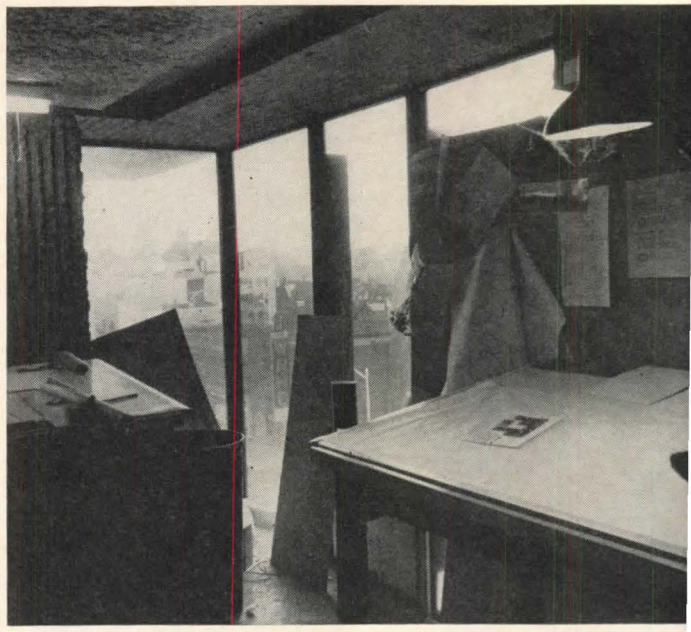
Ceiling height for the sculptors is a far more basic constriction. Lucky are those who work near the outside wall, able to borrow height from the monitors that go through to the next floor. It has been suggested that the ceiling be removed between beams in this area, adding another 18 in. or so to the usable height of the work area.

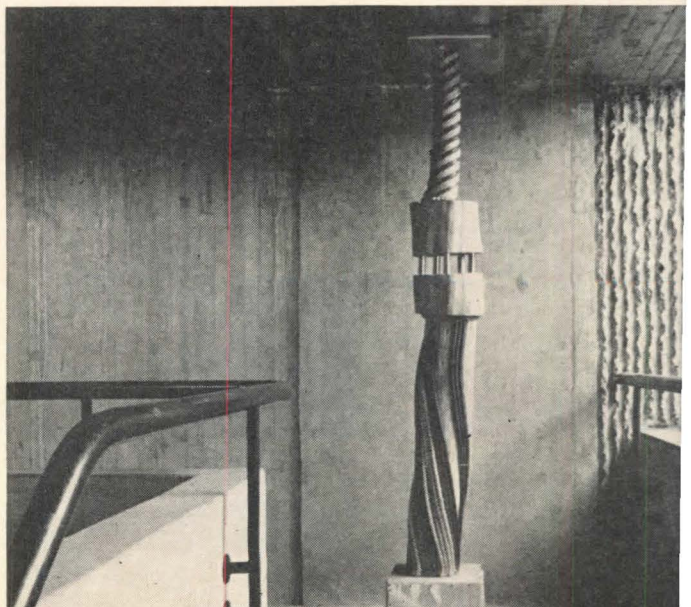
There are further criticisms:

- Security problems. "No one foresaw the problems of being open 24 hours a day," says Dean Gibson Danes, who came to his office in the same year (1958) that Rudolph became chairman of the architecture department. The exhibition area and library should have been separate from other facilities, Danes feels.
- Acoustical problems. Added to those already mentioned (between open floors) are those, for instance, in the basement auditorium where the mechanical equipment and any loudly swearing student in an adjacent studio are fully audible.
- Privacy problems. Faculty offices, on the administrative level, are not ear-tight. The architecture chairman's office has only become private with the addition of a door and the extension of partitions to the ceiling.
- Maintenance problems. Doorknobs have fallen off. The bare concrete of elevator lobbies has been terrazzoed.
- Educational problems. Perhaps the most serious shortcoming on this long list is the fact that the entire building essentially represents one person's approach. This has been criticized recently even by Nikolaus Pevsner, who gave the laudatory address at the building's dedication. The enthronement of the jury, the dearth of seminar rooms, every allocation and arrangement of space amounts to what one professor calls "a teaching program that has been poured in place."



The building has a lived-in quality. Sometimes the liveliness is remedial (above) where drawings are fixed to windows as a way of simultaneously hanging the drawings and blocking out the sun. Some of the clutter is from students at work (below). And the obstruction in the stair hall (bottom) is from a seminar where students created works for various spaces. Opposite: the interpenetration of space, looking from the exhibition area into the library.





THE CONTROVERSY

"Of course, anyone will gripe, given half a chance," says one defender of the building. Many find the building fun, inventive, spatially exciting, romantic. "It is one of the very few buildings with a sense of person about it," says an art teacher. "Here is a designer who took it in his hands and shaped it. This can't help but be a good example."

Esthetic impact is hotly argued. "The vertical organization of space just doesn't come off, and in many parts of the building you are *totally* unaware of the spatial intricacies." One fourth-year student says, "I'm sick of all the jigs and jags," while another continues to make delighted discoveries. "I'm tired of fighting back against it," says a third student. "But that's the whole point," argues his friend, "it demands involvement and you're still reacting to it, one way or the other." Many students are resentful. "Rudolph doesn't care how people react, just as long as they react." When a first-year student reports, "I'm one of the few who likes it," it is apparent that although many may detest it, all have been forced to confront it.

Is the building responsible for the *favella*? Some say yes, that the shanties are an attempt to shut out the overpowering architecture, or to carve out some privacy. Others say no, that architecture students will build wherever it is permitted, carving up the smallest and most nondescript drafting room. Rudolph is pleased: "People should do as much as they want to."

Is the building responsible for the extensive graffiti? Possibly it is defacement from hostility. Or possibly this visually oriented group will express its energy on any walls. But the Yale graffiti is not the usual bathroom banter—is not even confined entirely to bathroom walls. At Yale, "Help" is a four-letter word; and "Moore is least" is one student's anonymous comment on his world. Rudolph is calm about the graffiti, the cracks, and the crumblings —they are part of what happens to a building, he feels, and are more real than a slick surface that remains pristine.

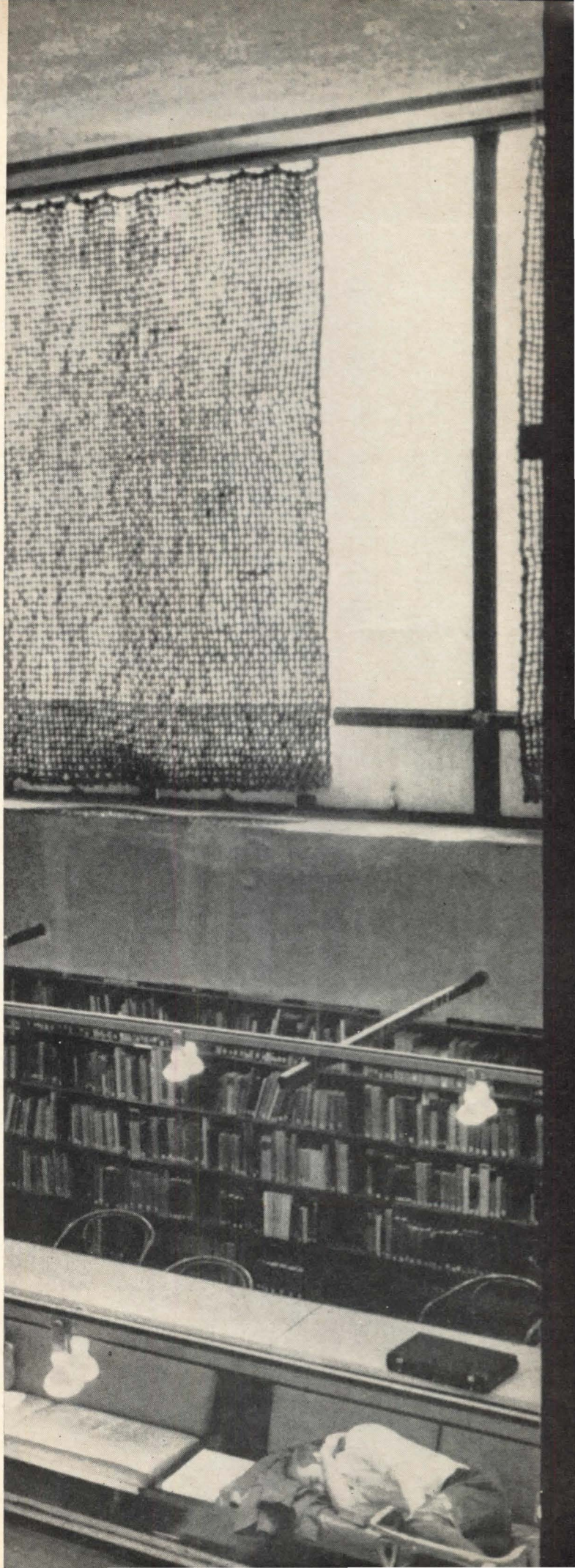
Despite indignation, students may be more at home here than in the homes where they grew up. "You can do anything to the building, it's indestructible," says one student as he pulls off a handful of the ceiling. "I go along the wall with a hammer in my hand; and we spray models in the stair tower." Maybe a building for young people is best when it becomes like old clothes. This one is like an old jacket—still warm and wearable, but with the buttons falling off and the edges frayed.

The building has an undeniable impact on the students' appreciation of architectural responsibility. Why, they ask, was there so little foresight concerning students' needs? Why so little attention to whether cargo netting would screen the sun? And what happens when a budget is tight—what gets cut, and by whom? "There's something wrong about a man six floors in the air chipping away at that concrete," says one of the architecture professors. "But it isn't fair to criticize Rudolph for not making an exciting building that also works. Yale only asked for an exciting building."

To some students, this attitude is shocking. Yet they report that visitors are equally shocked to find the building so strongly resented, when it was so strongly praised in the press. This, in fact, may be one of the building's major lessons. There are few architecture students at Yale who aren't aware of the need to take a second look at many buildings in use, and the need, in many cases, for an architect to take a closer look at the ultimate users of a building. The building is emphatically an education, for students in and out of school, and in a time of bland buildings and bland education, perhaps this is unique praise for a unique building.

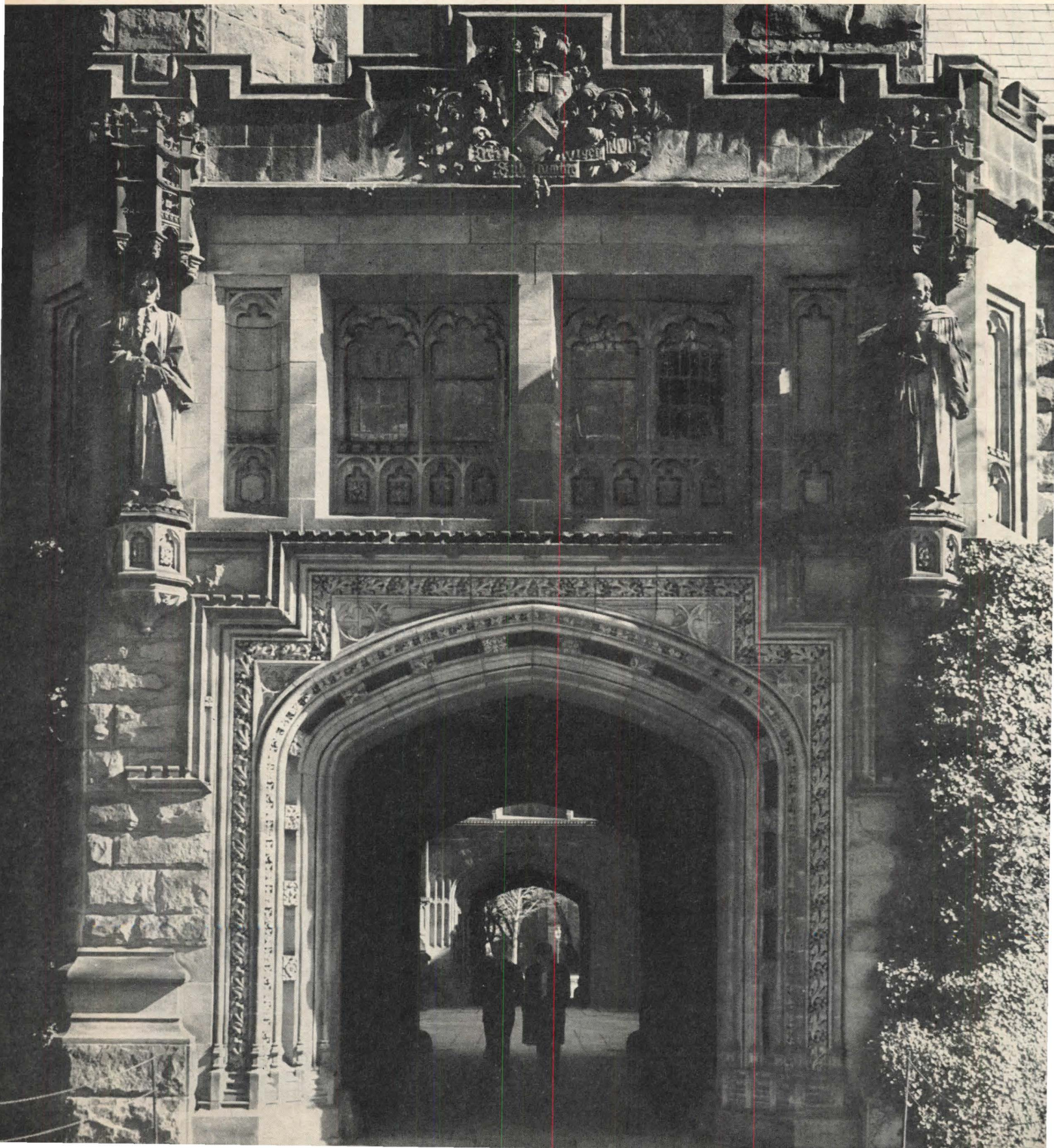
—ELLEN PERRY BERKELEY

PHOTOGRAPHS: "After" photography by Roy Berkeley; "before" by Ezra Stoller Associates.



PRINCETON

breaking the gothic habit



Of all the U.S. universities that have been addicted to Collegiate Gothic architecture, Princeton has probably had the longest and most severe withdrawal pains. Discussing the slow acceptance of modern architecture on the campus, Burchard and Bush-Brown wrote in *The Architecture of America:* "In the end the archcitadel of reaction remained Princeton, cozy in its Gothic." The "end" they spoke of was 1960, the year their history was completed.

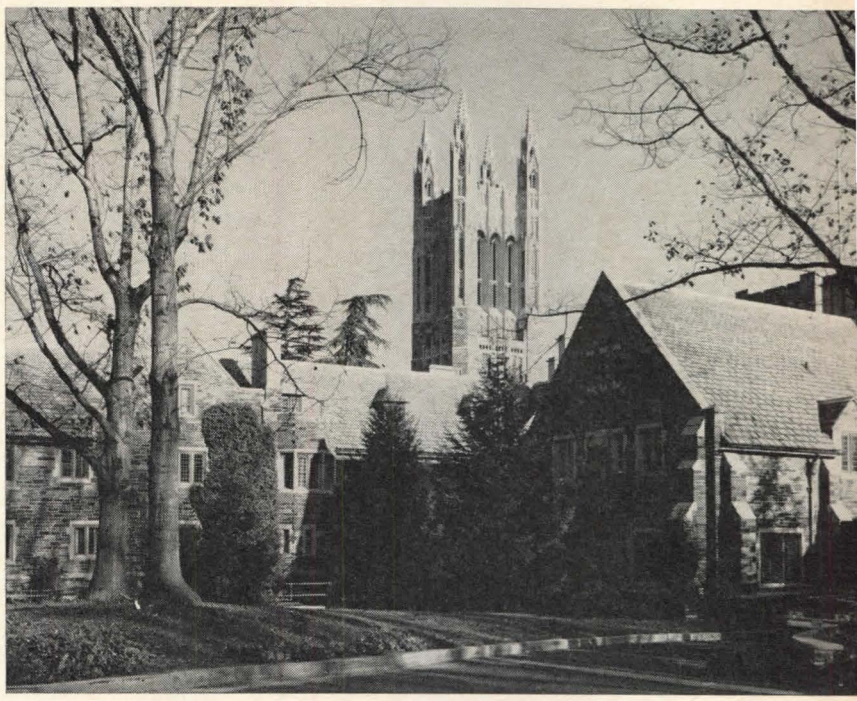
In that very year, they reported, the Italian architect Enrico Peressutti "resigned publicly from the architectural faculty as a reproach to the archaic policy of Princeton's trustees," and the late Douglas Orr, then campus architectural consultant, was trying to promote more rational design but promising protection from "a jumble of new and daring styles, each screaming for a place in the magazines."

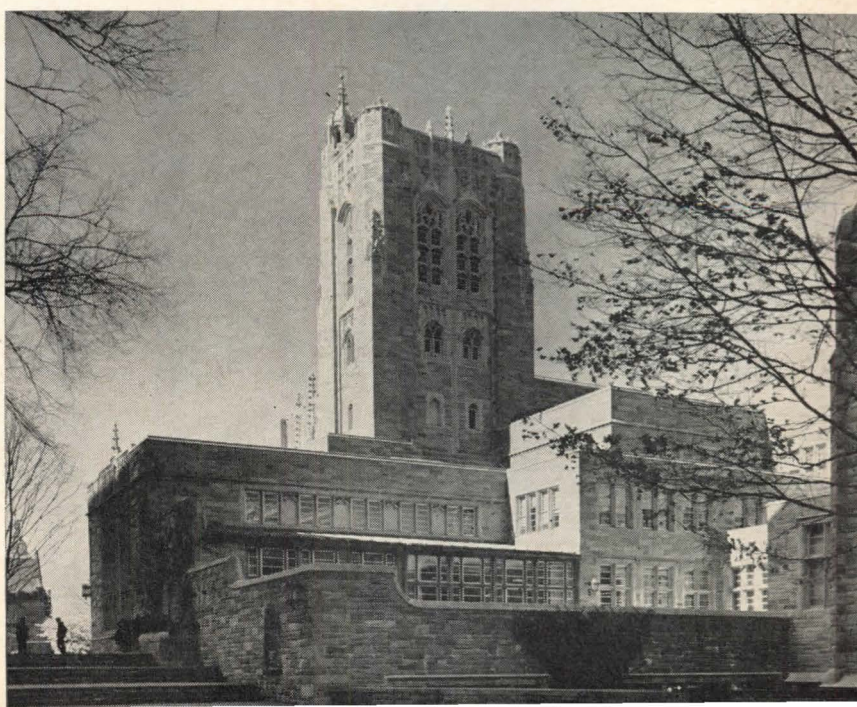
Princeton did not develop its attachment for the Gothic very early. Its original 18th-century buildings were provincial Georgian, with rubble walls of a local variegated brownstone. Through the 19th century, Princeton followed other fashions—Greek Revival, Italianate, and Romanesque. One building of the early 1890s, Faxon's Brown Hall (top right), shows some of the severity of the first Chicago School.

Once Collegiate Gothic arrived (in William Potter's East Pyne Hall, left), it remained Princeton's only style throughout five decades of extensive growth. The masters of Gothic eclecticism —Cope & Stewardson; Cram, Goodhue & Ferguson; Day & Klauder—designed buildings for Princeton. Aside from architectural consistency, they gave the campus spatial sequences hardly equaled in the U.S.

But Gothic style was not easily applied to the larger, functionally more complex buildings Princeton needed after World War II. On the Firestone Library (bottom right), for example, Gothic details count for little, scattered as they are across vast areas of mass-produced windows.

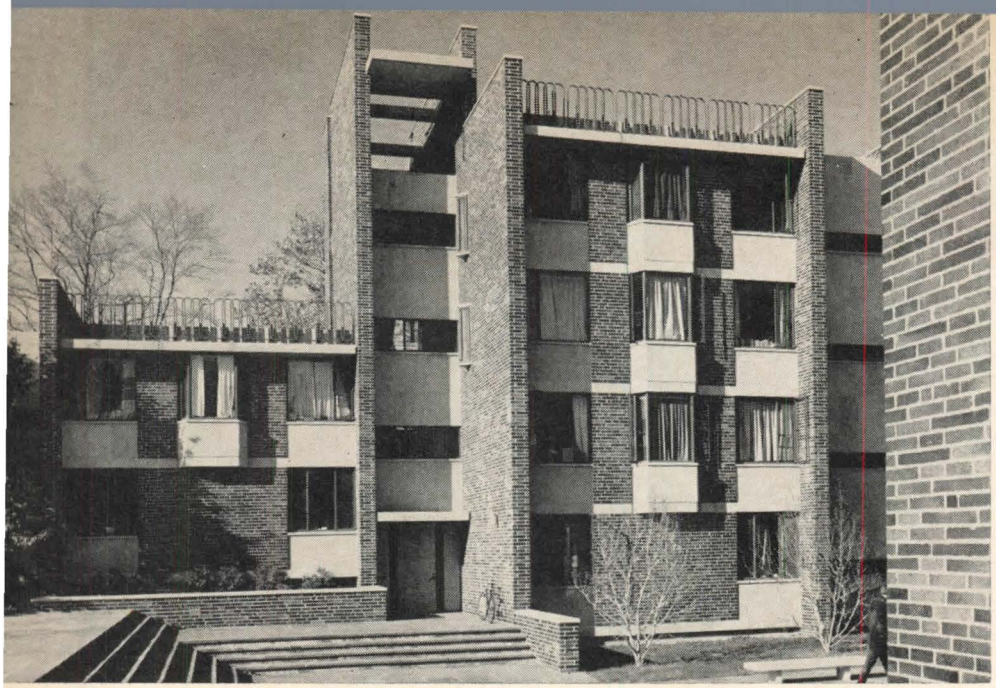


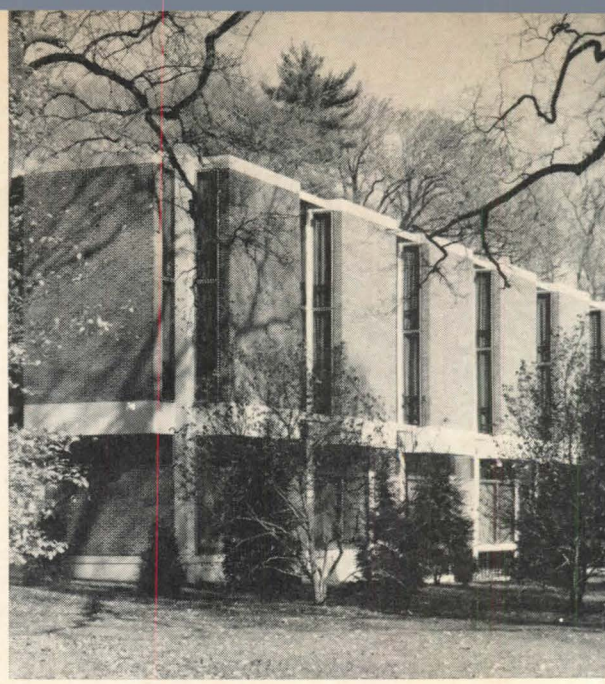


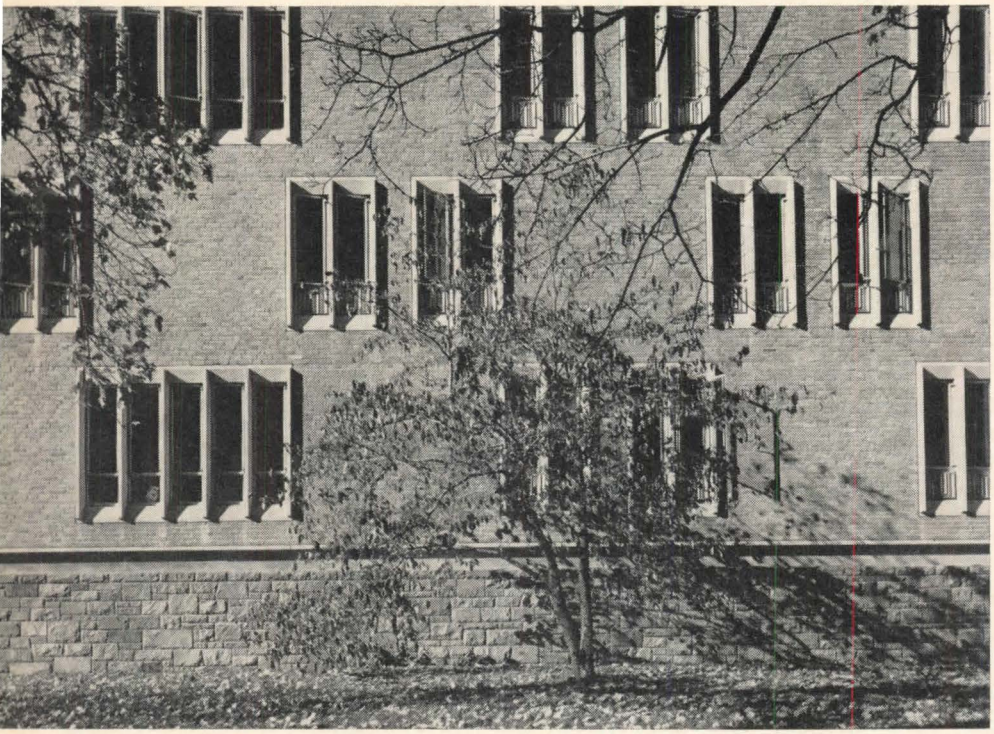


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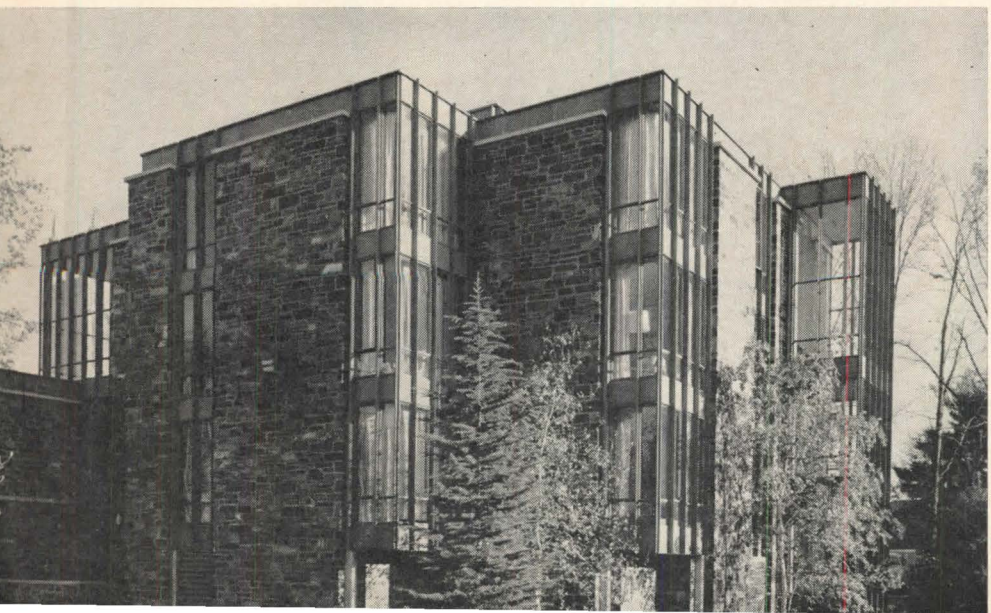
1. William A. Potter's East Pyne Building (1897) set a precedent for Gothic style and for passageways through buildings and courts. 2. John Lyman Faxon's Brown Hall (1891) was the last unbroken rectangular block built on the campus for more than half a century. 3. Cram, Goodhue & Ferguson's Graduate College (1913-1927), on a site separated from the campus core, was a high-point of the Gothic Eclectic style. 4. O'Connor & Kilham's Firestone Memorial Library (1948) has a capacity of more than 2 million volumes. Gothic details do little to reduce its bulk. (Numbers above are keyed to map, page 57.)

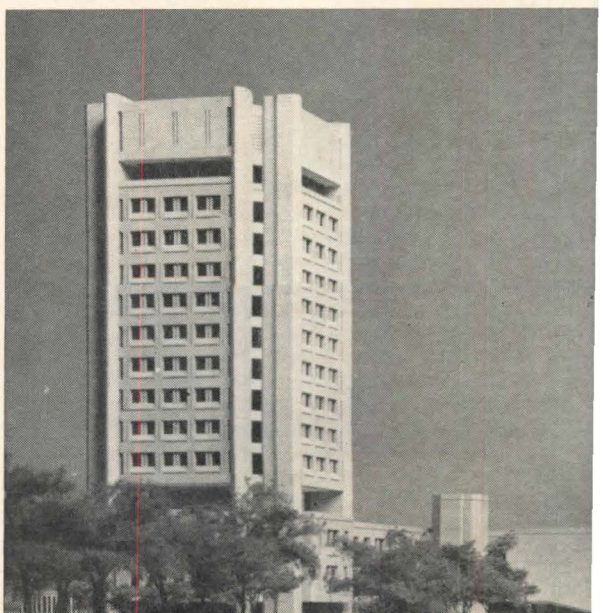


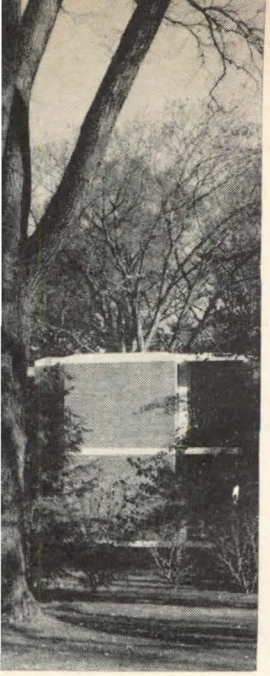


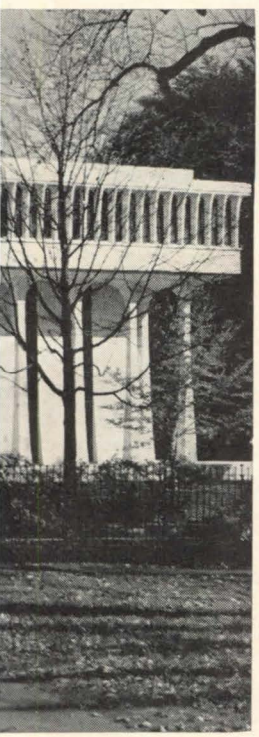


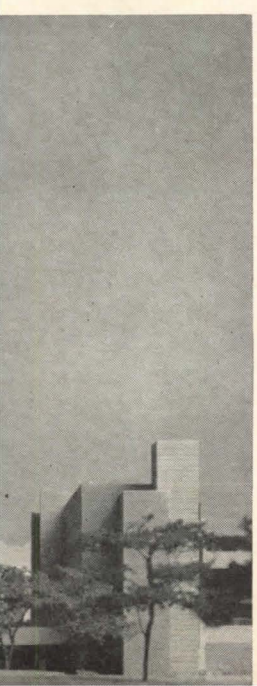












UNEASY ADJUSTMENT



Recent buildings at Princeton (numbers keyed to map above): 5. Dormitory group by Hugh Stubbins & Associates (1964). 6. Typical wall, dormitory group by Sherwood, Mills & Smith (1961). 7. Graduate College dormitories by Ballard, Todd & Snibbe (1963). 8. Architecture Building by Fisher, Nes, Campbell & Partners (1963). 9. Woodrow Wilson School of Public and International Affairs (named for a president of Princeton who became U.S. President) by Minoru Yamasaki & Associates (1965). 10. Preliminary design model for mathematics tower by Warner, Burns, Toan & Lunde, joined under a paved court to a physics building by Hugh Stubbins & Associates, partly visible at the right.

5	8
6	9
7	10

By the early 1950s, Princeton had already departed from the Gothic tradition in a few virtually styleless structures, none of them inside the campus core.

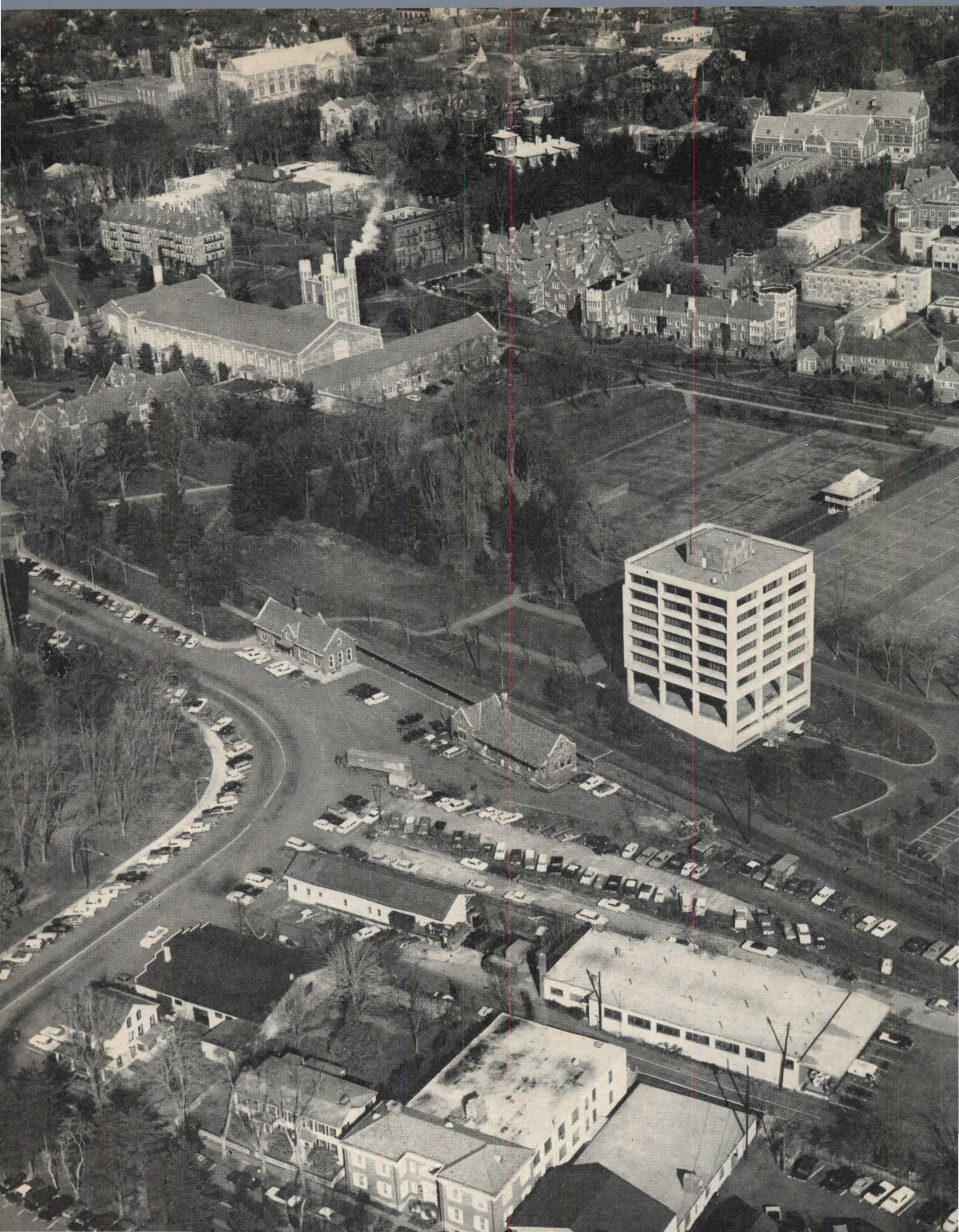
By the decisive year of 1960, however, Princeton started to build extensively right next to its prized Gothic groups. Princeton's stylistic crisis coincided with a renewed concern among modern architects about the relation of buildings to context. Gothic forms were especially alien to the modern mainstream of 1960, but Rudolph had shown in his Jewett Arts Center at Wellesley (1958) that a respectable compromise was possible.

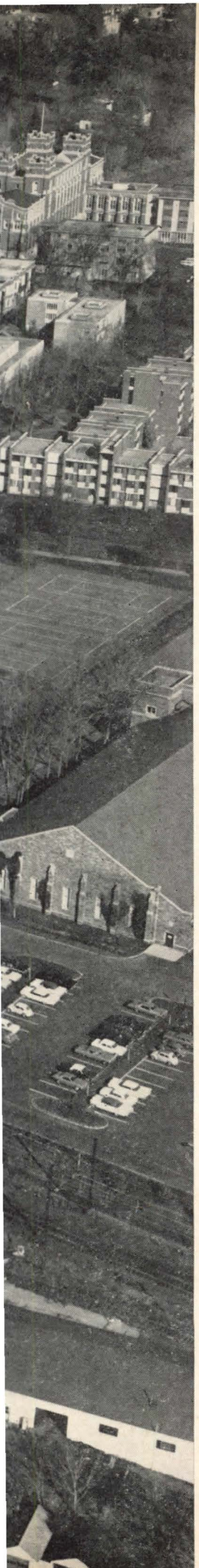
Princeton's first attempts at compatible modern were not very successful. Hugh Stubbins' dormitories (5) suffer from self-conscious variation in massing and details. These flaws may have been reactions to the superficial appliqué of "Gothic" windows on the big horizontal masses of Sherwood, Mills & Smith's earlier dormitories (6).

A more successful effort at compatibility appears in Ballard, Todd & Associates' graduate dormitories (7), which are additions to Cram's picturesque Graduate College (page 55). Delicate bay windows and stair towers, counterbalanced by slabs of rubble-stone wall, are logical and suited to their purposes. Fisher, Nes & Campbell's Architecture Building (8) also relates well in scale and massing to its Gothic neighbors, without compromising its internal logic.

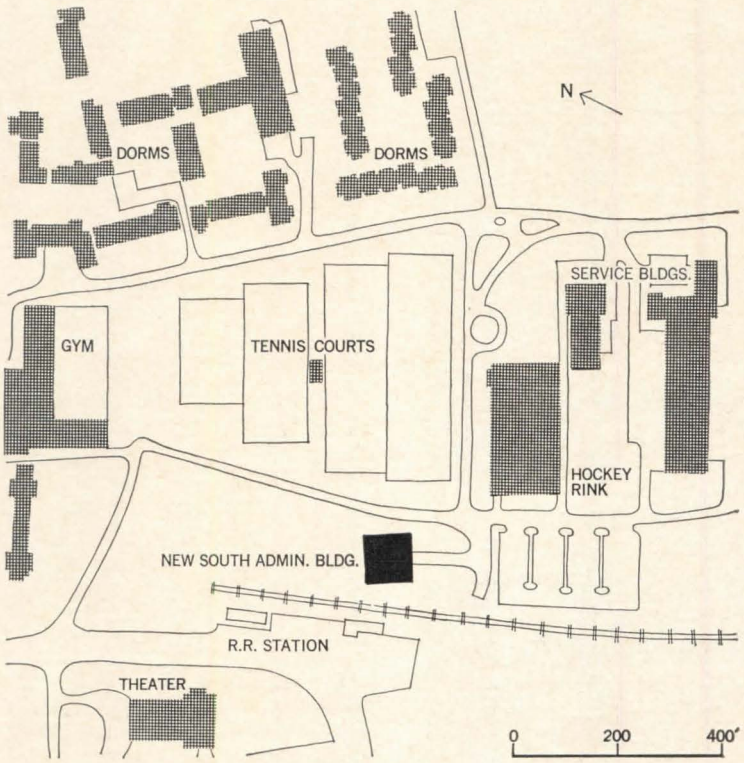
The most popular new building on campus is Yamasaki's Woodrow Wilson School (9). Its monumentality and opulence appeal to the public, which sees its vaguely Gothic vaults and mullions as gestures toward Princeton's tradition. Only people connected with the architecture school find its sleek white surfaces discordant or seem aware that similar Yamasaki buildings can be found in other places not identified with that tradition.

The largest project now under construction at Princeton, a mathematics-physics complex (10), shows affinity for the Gothic groups, mainly in the way its tower relates to the lower masses and the courts they enclose.





A CLEAN BREAK



Barnes's New South Building stands alone on a low bluff (facing page), but it will eventually be surrounded by dormitories to the north and a performing arts center to the west (built around the existing theater). Specific plans for the area depend on whether the railroad spur that links Princeton to the world can be shortened a few hundred feet.

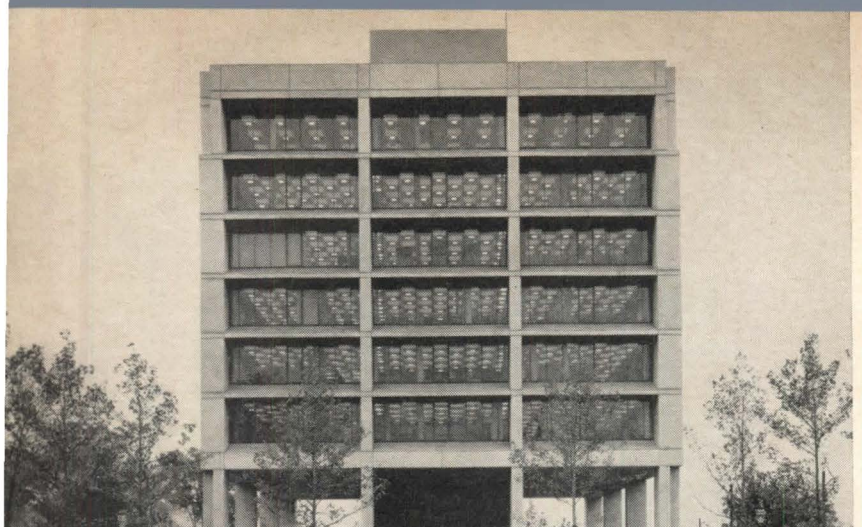
There is one new building at Princeton that shows no attempt at all to adjust to the building pattern of the campus: Edward Larrabee Barnes's New South Administration Building. Among Princeton's architecturally informed minority, it is widely admired for its discipline, a relief—for some—from the pervasive coziness. Many others, however, especially townspeople and sentimental alumni, see in it just what they want to keep out of Princeton: the large scale and straightforward structural expression they associate with urban buildings.

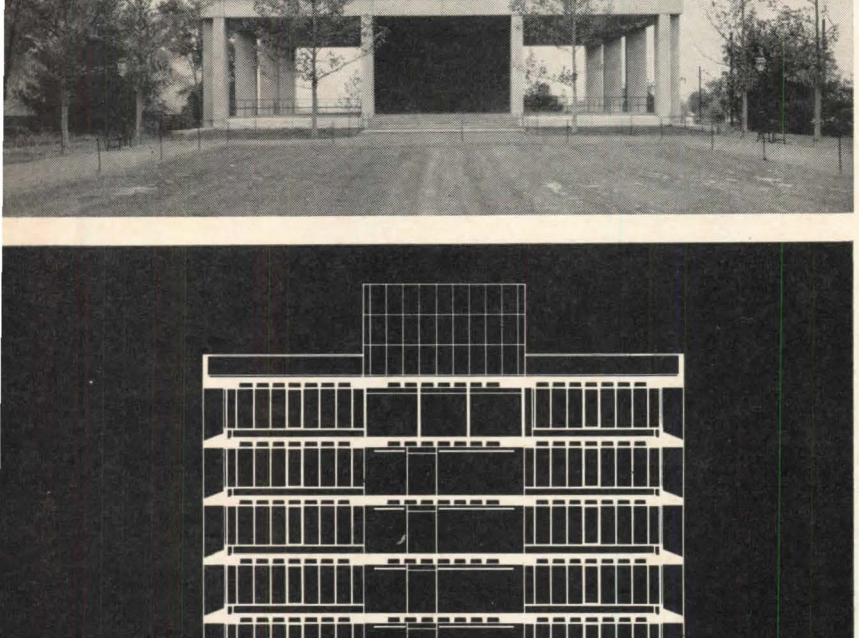
Barnes's rejection of the existing pattern is obviously not based on the presumption that it was not worth considering. He had previously designed buildings for St. Paul's School, Yale, and other campuses that were adjusted to their context.

One reason for breaking the pattern here may have been that Barnes was commissioned just as some of the least successful efforts at compatibility were being completed; they might have made both architect and client wary about trying to "fit in."

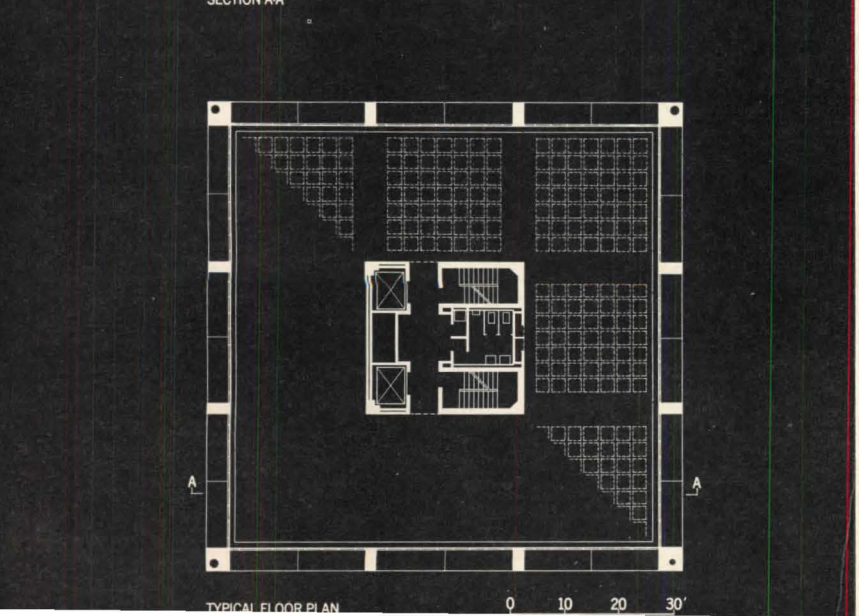
Another reason was that Barnes's building (unlike Yamasaki's, for instance) was too far away from major existing groups to allow for meaningful spatial relationships. His building was pushed to the south to make room for dormitory expansion, as yet unplanned. All that Barnes could foresee was that other buildings at the south end of the campus—such as the mathematics-physics complex (preceding page) and a proposed performing arts center—were likely to be large in scale, and that the spaces between them, mostly parking lots and playing fields, would remain large. Since the land drops off to the south, larger buildings here would not compete with the old spires on the skyline.

The functions of Barnes's building are simply those of an office building. It contains facilities for financial and alumni record-keeping, etc.—nothing requiring ceremonial treatment or generating heavy visitor traffic. What the users of the building wanted was efficient office space.





SECTION A-A



TYPICAL FLOOR PLAN

The two lower floors of New South, partially sunk into the hillside, house service and mechanical facilities. Separating them from the office floors is a loggia at main entrance level. On the top floor is a cafeteria with a sweeping view of the campus, appreciated even by those who find the building disconcerting. Its more widely spaced pattern of lighted ceiling coffers can be seen in a dusk view of the north front, top left.

THE REPERCUSSIONS

The Princeton administration building is Barnes's first office building. (He has since designed a much larger one, with Emery Roth & Sons, for downtown Boston.) His solution is based on two ruling concepts: a technical concept of integrating structure, ducts, lighting, sun-control and partitioning; and an esthetic concept of starting with a pure geometric form, out of which notches and voids are cut.

The structural scheme is based on a 27-ft.-square bay which just fits the needs of the central core and leaves office space of optimum depth around it. At the main entrance level only the core is enclosed.

Exterior columns and spandrel beams, both 4 ft. deep, shade the dark brown glass enough to make blinds almost unnecessary. At the corners of the building, the columns meet to form L-shaped piers. These L's have been filled in to form hollow squares where they house air conditioning risers (supplied from the core through ducts above the main-floor loggia).

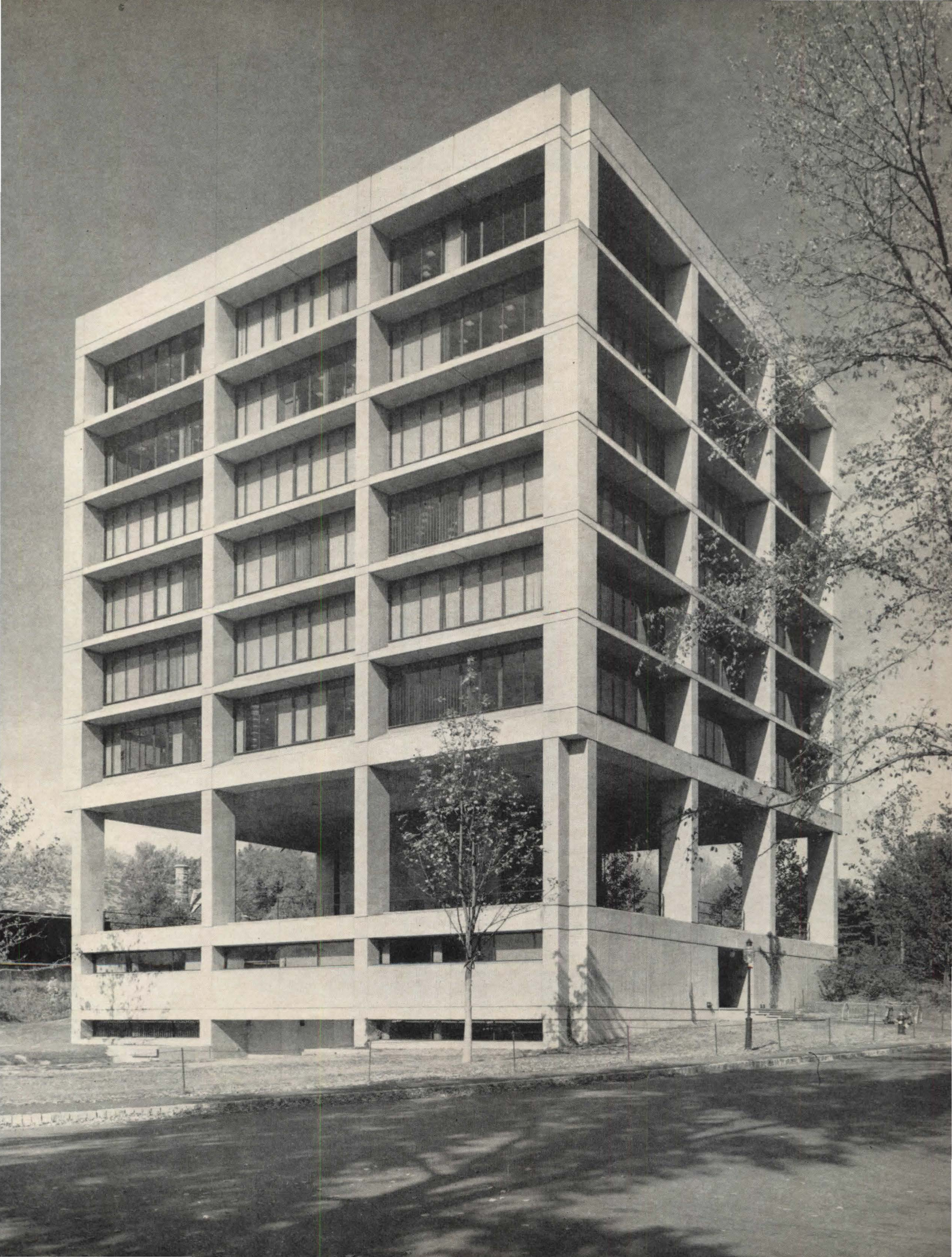
These square portions of the piers define the limits of Barnes's hypothetical geometrical form, but the esthetic intention is not immediately clear; the infilling of these parts tends to look like *added* volume around the building's midsection.

The pan-formed floor structure is supported on 6-ft-wide shallow beams. Lighting fixtures hanging in every other coffer—checkerboard fashion—yield surprisingly uniform illumination at desk level. The need for ceiling ducts is eliminated by the combination of windowsill units and slot diffusers in the core walls. Concrete details throughout the building—expansion grooves, joints in the plastic-coated forms, and tie holes—have been scrupulously laid out.

Princeton's architectural specialists may appreciate the technical elegance of Barnes's building, but it will make some others in the community yearn for the medieval. Ironically, it could be that the popularity of Yamasaki's Woodrow Wilson School (pages 56-57) will keep the university receptive to current architectural thinking. —JOHN MORRIS DIXON

FACTS AND FIGURES

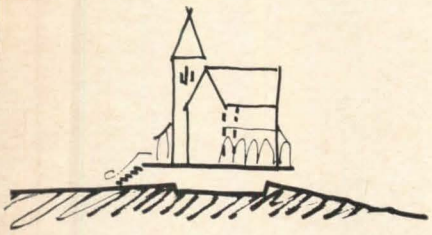
New South Building, Princeton University, Princeton, N. J. Architects: Edward Larrabee Barnes; associate: Alistair Bevington. Engineers: Severud Associates (structural); Meyer, Strong & Jones (Mechanical). Landscape architects and campus planners: Clarke & Rapuano. General contractor: Matthews Construction Co. Building area: 59,000 sq. ft. Cost: $1,801,066. PHOTOGRAPHS: George Cserna.



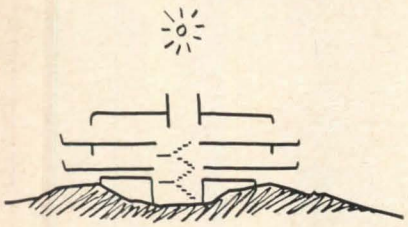
LAKE ERIE

constituent imagery determines campus design

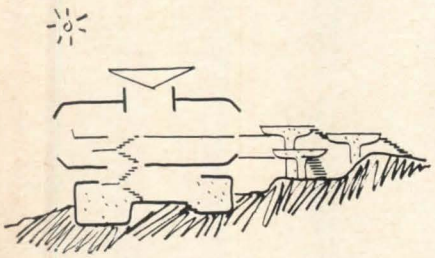
In the following text, Architect Victor Christ-Janer describes the principles that have guided his work at Lake Erie College in Painesville, Ohio, with special emphasis on his design of the James F. Lincoln Library, which won for him the 1967 R.S. Reynolds Memorial Award.



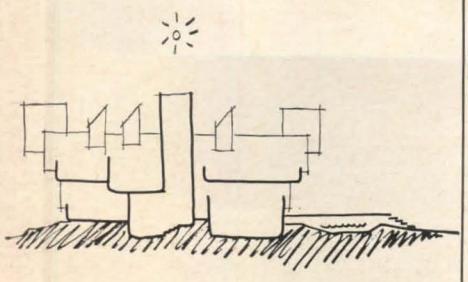
1. COLLEGE HALL



2. DORMITORIES



3. LINCOLN COMMONS



4. LINCOLN LIBRARY

Lake Erie College has carried out its building program following a comprehensive plan drawn up in 1954 (Sept. '57 issue). Under the presidency of Dr. Paul Weaver, it has achieved its established goals for growth (500-550 students). Eight new buildings have been completed—a commons building, a science building, an infirmary, a library, and four dormitories. A theater arts building is now being designed to round out the plan.

The paradoxical argument which an existential experience presents to the concept of planning has been central to the architectural approach. The plan, campus, and individual buildings are committed to educational program as opposed to architectural visibility. Constituent imagery has been selected as a method instead of the formal posturing of architectural images. By constituent image I refer to objective recurrent physical phenomena to which the unconscious responds in a dimension beyond psychology.

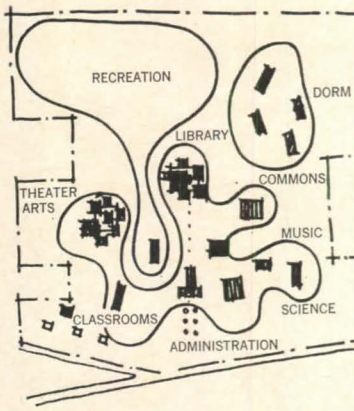
To the degree that the plan becomes real it must be self-authenticating; it must possess the flexibility to bend to expediency yet speak to its own reality. These considerations led to the development of a *zoned* master plan (top right). Flexible areas were assigned for academic, recreation, and housing. Pedestrian and vehicular traffic between these areas shape the action on the campus and reflect the students' living patterns.

Lake Erie College originated as a seminary for women in the period just after the Civil War. Built on a rural, open site it stated itself quite formally to the major road in the community by its monumental size and the strong axial walk leading to a generous front porch (1). The young women sat on the porch ten feet above the ground and viewed the horse-and-buggy traffic from this vantage point.

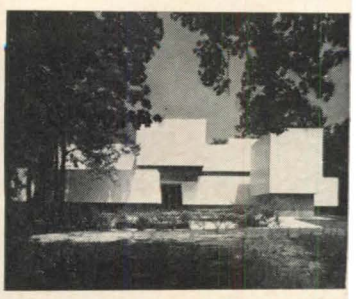
This detachment of the living plane one story above the ground level has been restated throughout the new buildings in ways appropriate to each individual building. A strong emphasis has been placed upon the methods by which one leaves the ground plane to enter the envelope of the building proper. By stating the separation of ground plane from the earth plane so succinctly it offered a commonality to the over-all campus. In the dormitory design (2), for instance, earth berms define an entrance passage below the building; an open stair relates to a skylight above, stating the earth-to-sky relationship.

Two buildings, the Lincoln Commons and the Lincoln Library (in memory of Mr. and Mrs. James Lincoln), were designed to fix the position of the heart of the campus. The Lincoln Commons (3) is an extroverted expression with a tubular steel and glass facade (Dec. '60 issue); the Lincoln Library (4) is an introverted expression with an aluminum-draped facade. While they set up a dualistic tension in idea and esthetics, they are bonded by the common philosophy of earth-sky relatedness.

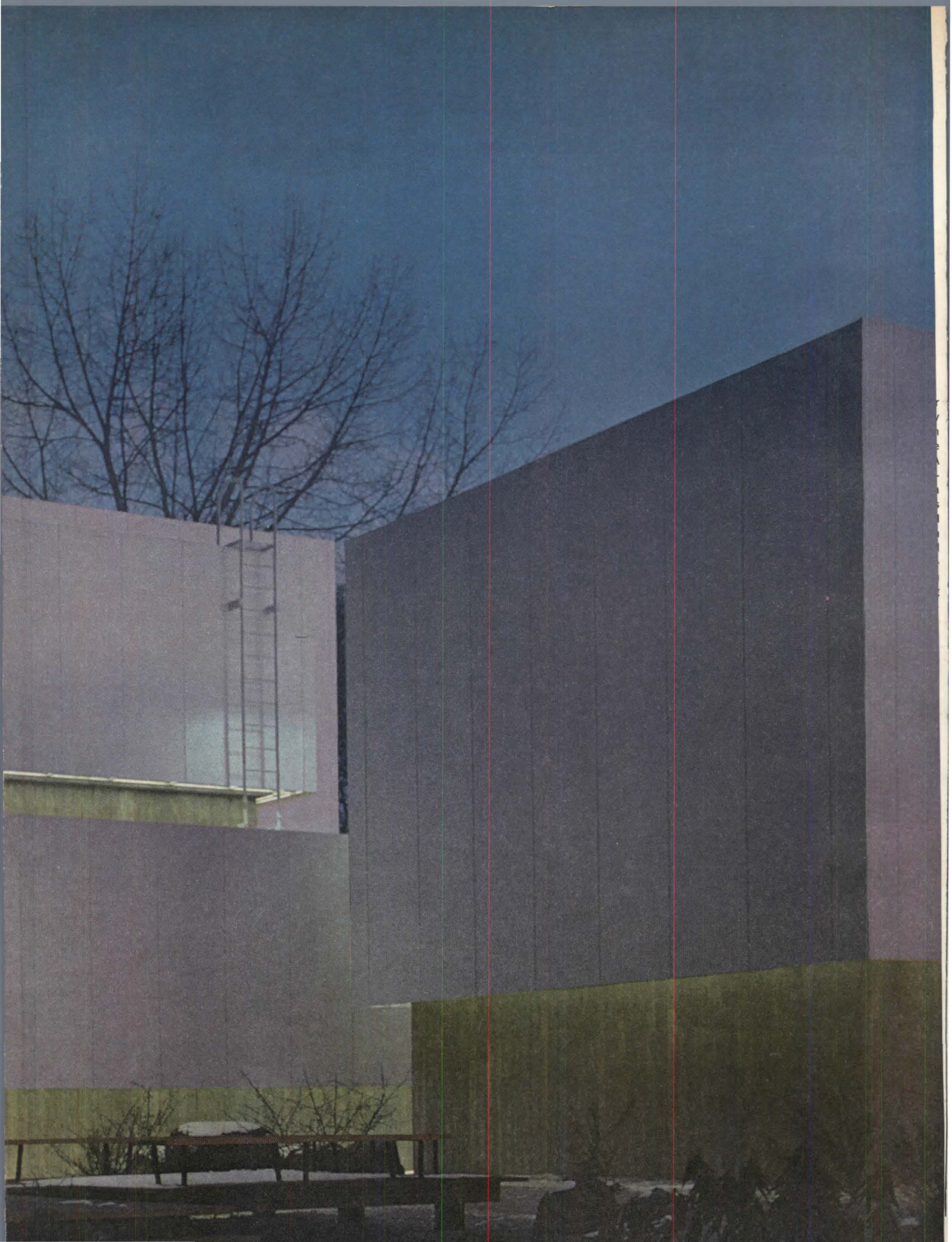
In the library, earth forms are designed in concrete and remain in form and texture as rough, elemental forms. Both the materials and the character of the space above are aimed at lightness and free flow. The tension between heavy materials and light materials, the enclosed



Christ-Janer's library at Lake Erie is composed of a series of aluminum-faced cubes that seem to float above and over the base of the building. By contrast, the base itself is constructed of rough-textured concrete, emphasizing the lightness of the structure above. At night, colored light from the horizontal glass strips at the base of the cubes bathes the exterior walls (right). Below: the west facade of the building.







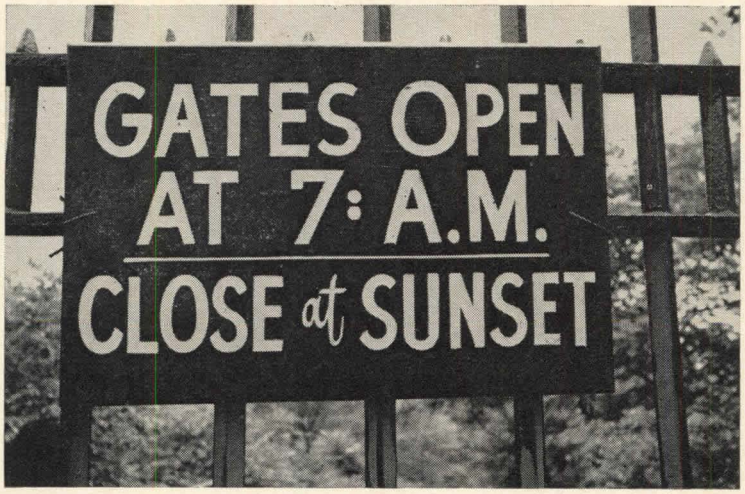


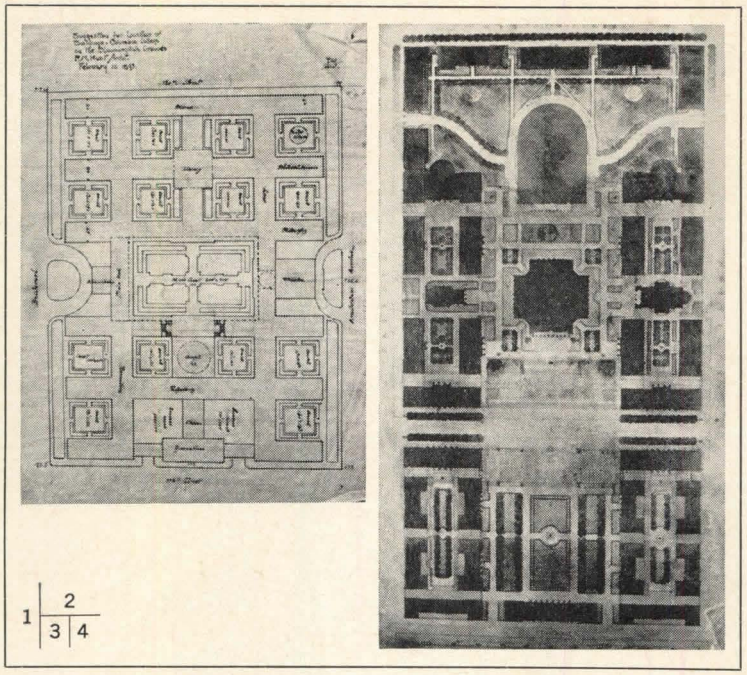
COLUMBIA

pleonexia on the acropolis



BY C. RICHARD HATCH





1 | 2
3 | 4

1. Aerial view of Columbia, looking north; Hudson River at left, Morningside Park at right. 2. Morningside Park, empty at night, separating the institutions of Morningside Heights from the surrounding black ghetto. 3. Plan by Richard Morris Hunt, 1890, a remarkable early megastructure, rejected for unknown reasons. 4. Plan by McKim, Mead & White, 1893, followed by Columbia for 30 years.

C. Richard Hatch is executive director of the Architects' Renewal Committee in Harlem Inc., and a member of our Board of Contributors.

Now, Thrasymachus, tell me, was that what you intended to say —that right means what the stronger thinks is to his interest, whether it really is so or not? Most certainly not, he replied. Do you suppose I should speak of a man as 'stronger' or 'superior' at the very moment when he is making a mistake?

PLATO, REPUBLIC, III.

There are seven academies in the groves of Morningside Heights, a small bluff in Manhattan's upper West Side which looks out over Harlem (1). The men who run them are fond of calling the area the "Acropolis of America"; and while the intellectual quality of many of the institutions is outstanding, the present quality of their building hardly justifies identification with the well-known hill in Athens, where citizens took refuge against barbarians. Of course, the gates at the top of Olmsted's craggy park, which separates Morningside Heights from the black ghetto, are locked at sunset (2), and it may be the sense of being surrounded by a hostile population that suggested the presumptuous sobriquet.

Columbia University and its affiliates, Barnard and Teacher's College are the largest and best known of the institutions.* Columbia occupies the geographical center of the Heights and, since its rapid expansion program began in the late 50s, it has also been the center of neighborhood animosity. The issue is simple: forced relocation.

Columbia's almost insatiable appetite for land—it owns almost all the property shown in the photograph and is constantly acquiring more—promises to displace thousands of long-time white residents and poor Negroes who have come up to escape from Harlem's slums.

This is not the first time that Columbia has found itself tightly hemmed in and in need of more space. Its response in the past was to move, first from Park Place in lower Manhattan

* *The others are St. Luke's Hospital, Union Theological Seminary, Jewish Theological Seminary, and Juilliard School of Music (its new home now under construction at Lincoln Center).*

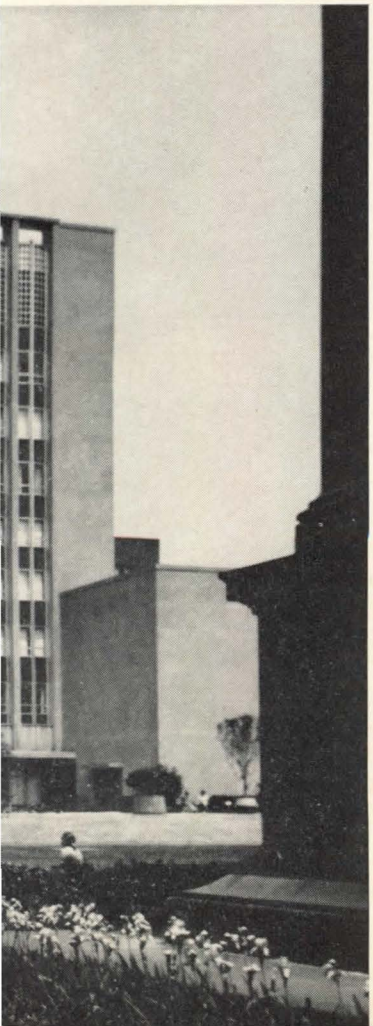


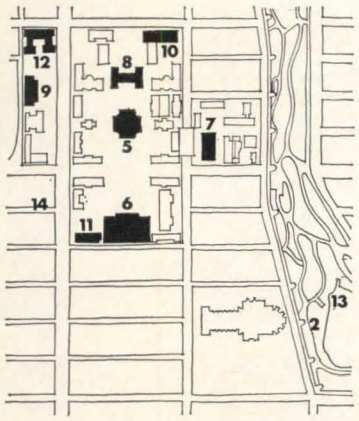












5	6
7	8

5. Low Library, 1897, by McKim, Mead & White, first building in the 1893 master plan. 6. Butler Library, 1934, one of several development decisions that destroyed the McKim plan. 7. The Law School, known locally as "The Toaster." 8. The new School of Business, similarly in a more or less contemporary manner.

(where it was chartered as King's College in 1754) to midtown (acquiring the site of Rockefeller Center, which it still owns, on the way) and then to its present location in 1897. Despite impassioned charges that it is destroying a sound, integrated neighborhood, and reasoned suggestions that an entirely institutional Morningside Heights may be more attractive to thugs than to scholars and students, Columbia has decided not to move again, but, in the words (1966) of Vice-President Lawrence Chamberlain, "to stand and do its job over the next 50 and 100 years." Let us take a look at the physical side of that job.

Architecture on the Acropolis

If the university's present planning is insensitive and its architecture heavy-handed, it was certainly not always so. When the trustees decided to move uptown in the late 1880s, they consulted with the leading men of their day—as befit a university which had created one of the first schools of architecture in the country. They turned first to Richard Morris Hunt, one of the first Americans trained at the Beaux Arts, who produced a rather remarkable early megastructure (3), incorporating all of the university's functions in a single building of Whitehall Palace proportions—although the meanness of its minor courts reminds one more of the Pentagon. The plan was rejected for unknown reasons, but Hunt left his mark on Morningside Heights in Grant's Tomb and the apse of the still unfinished Cathedral Church of St. John the Divine.

In 1893, Charles Follen McKim's classical scheme was accepted and construction begun the following year. McKim's grand and influential master plan (4)—incidentally, the first to be adopted by an American university since Jefferson's University of Virginia—guided the growth of Columbia for 30 years.

Incorporating in his design the four blocks which are still the heart of the university, McKim first built Low Memorial Library (5), the flanking chapel and assembly building with their echoing domes, and the classroom buildings along the avenues. The plan called for expansion to take the form of a number of major and minor courts created by lecture halls and dormitories. Only one, the Avery-Fayerweather courtyard (northeast of Low), was completed before the plan was abandoned.

Already by the 1920s fear that land might soon become scarce caused the university planners—abetted in part by the firm of McKim, Mead & White—to expand vertically, breaking the constant cornice line that had been originally adopted (John Jay Hall in the southeast corner of the campus). That simple act was the beginning of the stylistic and spatial chaos which marks the university today. The science buildings rose higher still, the clumsy Butler Library (6) diminished the grandeur of Low, the decision was made to build outside the campus—and by the end of the decade the master plan had been abandoned.

The burgeoning demand for graduate and professional education, already strong when Columbia celebrated its 200th anniversary in 1954, triggered the next great wave of construction. It shows no sign of abating as yet, with over $57 million worth of construction already programmed for the next few years. If the work of the recent past is any indication, we cannot soon expect a second golden age on Morningside Heights.

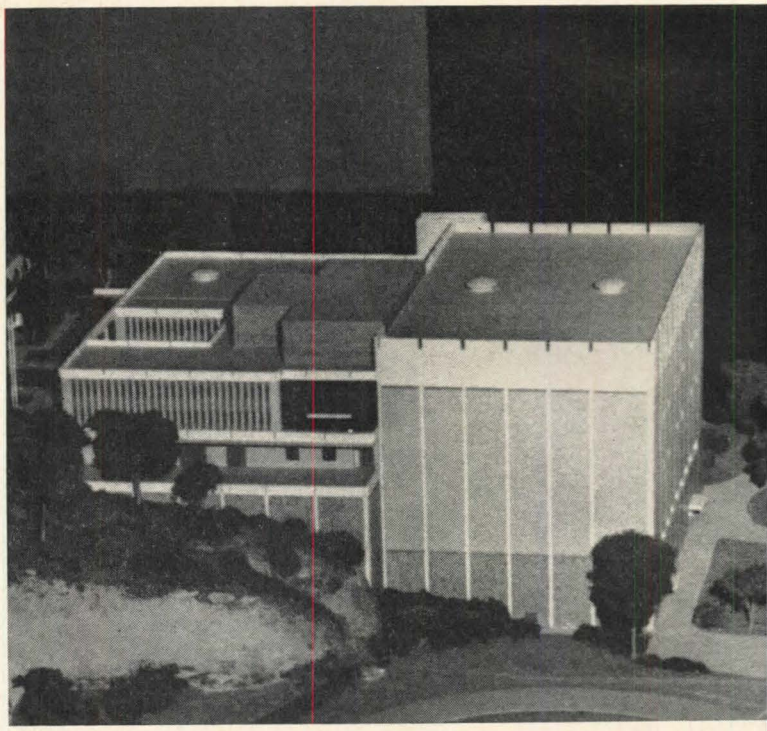
New and proposed buildings

The Law School marks the beginning of a *Drang nach Osten* which promises to extend McKim's library podium to the edge of the park in order to provide for faculty automobiles below. Although the interior spaces are cramped and inflexible, the most notable effect of this building (known locally as "The Toaster") is on the community, not on the lawyers. The forbidding street level vista which we now see (7) was once a part of a reasonably busy, pleasant shopping street, lined with shops and eating places. The

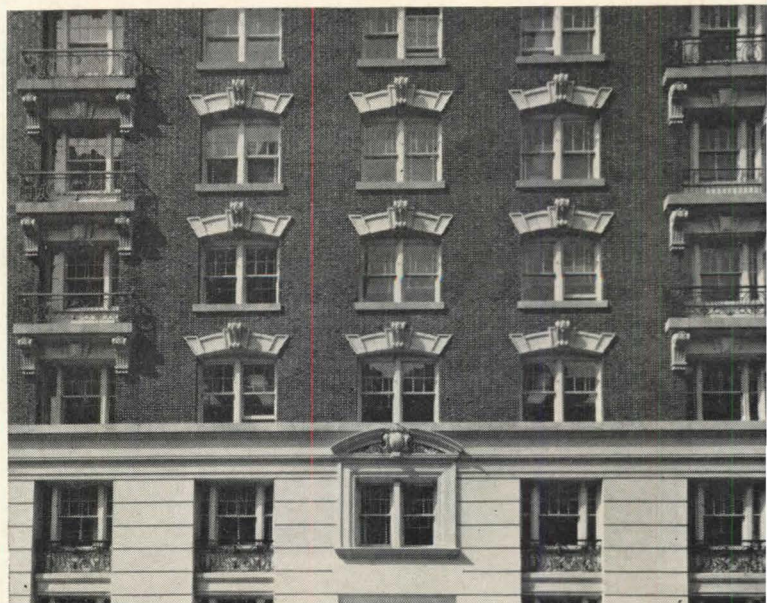












blank walls and the bridge interrupted the movement of residents and students; most businesses closed. Soon the entire strip will be dead as the last family apartments make way for dormitories.

Higher than McKim's dome and directly behind it rises the new School of Business (8), donated by Percy Uris, the well-known builder of speculative office buildings in midtown Manhattan. I presume it is in his preferred style; it is not in mine, although I am sure that it will properly prepare generations of future executives to work in the *real thing.*

If both of the above-mentioned buildings are recognizable (unfortunately) as being more or less in a contemporary manner, as is the Barnard Library addition (even with its dated, plaid fenestration, 9), what shall we say about the rest (10, 11, 12). Without referring to Mussolini and his architect, Mario Piacentini, it is enough to suggest looking again at the face the university turns to the community. Photograph 10 looks south toward the Law School bridge shown in photograph 7. Welcoming, isn't it?

As if it were not enough to make mistakes at home, Columbia University is now preparing to break ground for a predominantly private gymnasium in Morningside Park (13). The small portion to be open to the Harlem community is approached from the lower level through a separate and unequal entrance. Debate over this structure has raged since it was first announced. Ex-Parks Commissioner Thomas P. F. Hoving declared himself as "pretty damned upset . . . the most puzzling example of the use of public space for a private institution that I have ever seen"; and many groups in the surrounding, hostile territory still view the gymnasium as the latest, most blatant form of university imperialism.

That the university administration is guilty of *hubris* is suggested by more than the name they give their hilltop home. On the occasion of the 200th anniversary, Columbia issued, not a history of the university, but a history of the City of New York. The fund-raising slogan is "the greatness of the university and the greatness of the city are one."

The university, like the other institutions on Morningside Heights, is not popular with the poor, for Columbia is sure that the sanctity of its mission—"educating our future national leaders"—is of overriding importance and justifies the university's efforts to determine who and what may come to Morningside Heights.

In March, 1965, at the public hearings on the Morningside GNRP, itself an outgrowth of planning studies done for the institutions by Skidmore, Owings & Merrill in 1959, the eminent humanitarian and (at the time) university provost, Jacques Barzun, put it this way: *"We want it to be a residential community, for our own safety and satisfaction, even though within the next quarter century we must expand some of our educational facilities through new buildings. There is room on Morningside and adjacent areas for both institutional and residential activities. We recognize indeed that the people who make our streets unsavory and unsafe also have claims on society. They need care, rehabilitation or restraint. But these are technical problems we are not equipped to handle, even if it were proper to use our resources in a task we were not established to perform. . . . That is why we ask through renewal according to law and common sense, Morningside Heights be gradually restored to the status of a decent residential community . . ."*

Toward a scholastic ghetto

The key points of the program to create from the present attractive ethnically and economically mixed area a scholastic ghetto "where the faculty can talk to people like themselves"* are:

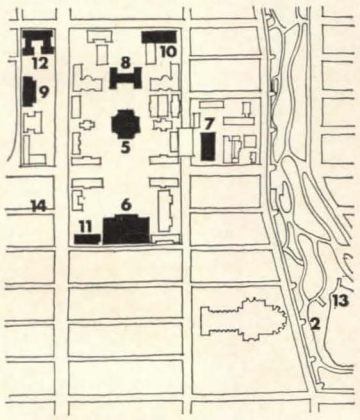
1. *Replace Single Room Occupancy buildings or transform them to university use.* Ironically, in driving out the most helpless and needy of the poor (mostly black) from the rooming hotels which dotted Morningside Heights, Columbia has acquired some of its better architecture (14).

Long identifying the poor (not entirely incorrectly) with the rise in violent crimes, the university has been willing to drive out the safe and sanitary poor on a wholesale basis to ensure that no "unsavory" elements remain. This high-handed action which has top priority in planning has been severely attacked by CORE, the NAACP, and the City Commission on Human Rights as being racially inspired.

The university officialdom never refers to race, preferring to demonstrate its lack of moral imagination through such phrases as "transient, footloose, or unhappily disturbed persons" (also from the Barzun statement). At least a thousand more SRO residents are scheduled to be shoved back into the slums because they represent "technical problems" which New York's greatest research and teaching institution, located on the edge of America's most famous ghetto, is not "equipped" or "established" to handle.

2. *Purchase residential property and select the tenants carefully, faculty first.* Columbia owned a whopping $61 million worth of rental property in 1966—and is acquiring almost any Morningside Heights property that comes on the market. Being a major real-estate taxpayer ($7 million last year), Columbia expects and often receives special consideration from the city in its private renewal efforts.

3. *If after campus expansion and housing for university-related families there is land left over, bring in more institutions.* Columbia, intent on *re*segregation of people and uses has ordered its School of Social Work to Morningside Heights from its present East Side location in the Carnegie mansion, despite faculty pleas for a building in Harlem where it might do someone some good. It tried



9	12
10	13
11	14

Recent additions, proposals, and conversions. 9. Barnard Library addition. 10. Seeley Mudd School of Engineering. 11. Student union and a new residence hall. 12. Barnard dormitory addition. 13. Model of the controversial gymnasium, soon to be built in Morningside Park. 14. McVickar Hall, recently a rooming hotel, now used by the School for International Affairs.

* *Then Development Coordinator Stanley Salmen in the* Columbia Daily Spectator, *Dec. 13, 1966.*

to bring its loosely affiliated School of Pharmacy in, but had to back down before a determined tenant organization protesting eviction. The university has succeeded in attracting (through cash loans and other incentives) Bank Street College of Education from the lower West Side and the Manhattan School of Music from East Harlem. These institutions have historically played an important cultural function in their working-class neighborhoods. On Morningside Heights they deny their previous ideals as they participate in a major community transformation which, according to official institution figures, will displace between 2,000 and 3,000 families and hundreds of roomers.

Plans for urban renewal

Not content with this onslaught, Columbia and the other institutions energetically supported an enormous urban renewal project on Morningside's fringes until 1965. Then local counterinsurgency (backed by then Manhattan Borough President Constance Baker Motley, a Negro lawyer from the project area) forced the inclusion of the core area where the major institutional expansion was taking place and the official adoption of a key restraint: after renewal, the ethnic and economic population proportions must be substantially the same as before.

The renewal program had been intended to extend the institution's concept of the savory neighborhood into black Harlem to the east and the Spanish-speaking neighborhood to the south. Major clearance of 73 blocks was proposed to create a circumferential defensive wall of middle-class housing. The Architects' Renewal Committee in Harlem, which was active in the debate, estimated at the time that over 15,000 households (roughly half the total number), composed mostly of the unwanted poor, would be dislocated—with little chance of finding relocation housing.

The local citizens' renewal council which had started as an institutional sounding board had come to be dominated by non-institutional interests. Feeling the hostility of this group, Columbia abandoned urban renewal as a strategy and apparently looked on with favor when the city recently shifted its renewal focus from the West Side to the heart of Harlem. The Columbia University Student Council reported at the time that the institutions were inclined to disfavor renewal, if their bailiwick had to be included. If their plans became subject to public scrutiny, it would limit their (then) unlimited freedom of planning and site acquisition! Which is just what the aroused community had—and still has—in mind.

Mayor John Lindsay sided, guardedly, with the community, announcing last year that all future planning on Morningside Heights must involve consultations among the institutions and the community, guided by the city. But, like an earlier city resolution which supposedly limited the institutions to the expansion program submitted in 1965 at the public hearings on the renewal project, Columbia's lawyers view these restrictions as unenforceable and urge a retreat to the market where Columbia and its sister institutions have the economic power to serve their own interests without restraint.

This, then, is *pleonexia,* a lovely Greek word meaning aggrandizement at the expense of the weak. It is the opposite of *arete,* the Greek word for moral, physical, and intellectual excellence. Unfortunately, ***pleonexia*** describes the recent goings-on on the Acropolis.

Function of an urban university

It is remarkable that for all Columbia's administrative insensitivity and overbearing manner, no community group has yet come out against the idea of university expansion. The regional and national importance of the university—considered as a body of scholars—is not doubted.

Columbia and other great urban universities like Chicago and Berkeley (which also have spotty records on renewal), have special locations which attract fine teachers and students. Their privileged positions carry with them special responsibilities—and opportunities.

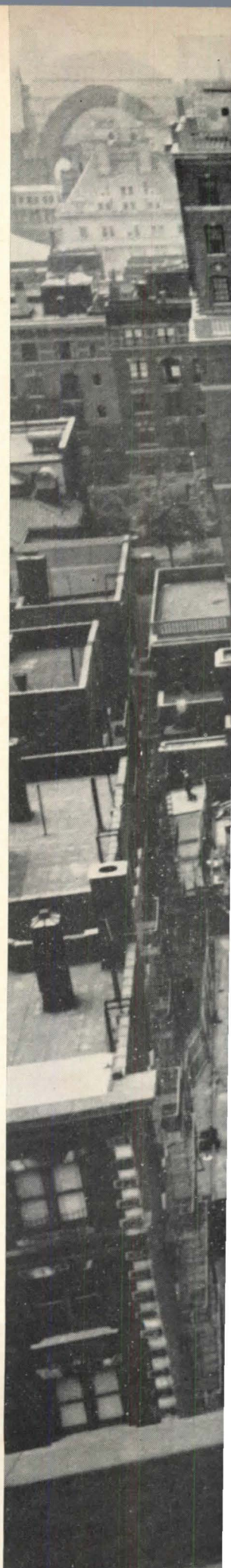
Harvard has found a way to incorporate town functions in its gown buildings; Tufts and Yeshiva are deeply involved in their urban school system; Temple in low-cost rehabilitation and local job development in North Philadelphia. But New York is the *epitome* of the urban problem; and I have no doubt that a great university and a great curriculum could be organized around the ways of life in New York.

If the greatness of the university and the greatness of the city are to be one, Columbia must recognize a duty to act as exemplar—in architecture, in community development, and in the treatment of the black poor, for they are the conscience of America.

There are slow signs that time is coming back into joint on Morningside Heights. The group which had been in charge of the university development program has been replaced in the last few weeks by younger men; university economists have joined with men in Harlem on a serious economic development project; and the students, with increasing faculty support, are leading the way down the hill into Harlem. Columbia's leadership is not wanted there, but its resources could help create the independent black institutions without which political, social, and economic progress will remain muted.

Pericles said that some call a man who takes no part in public business "a quiet man," but Athenians call him useless.

It holds for universities as well.



Looking southwest, along the eastern boundary of the old campus of Columbia. Beyond "The Toaster" is the hole in the ground that will be the new School of International Affairs.

PHOTOGRAPHS: Roy Berkeley, except page 68: Litton Industries-Aero Service Div. and page 72, No. 13.



BOOKS

TWENTIETH-CENTURY ARCHITECTURE the Middle Years 1940-65. by John Jacobus. Published by Frederick A. Praeger, New York and Washington. 200 pp. Illustrated. 8½ by 10 in. $18.50.

REVIEWED BY EDGAR KAUFMANN JR.

This is a handsome book, beautifully printed in West Germany. It contains a wealth of pictorial and textual documentation. The extensive notes are placed awkwardly and the typography is monotonous for steady reading, but these are only minor pests. The earnestness of the author and his tenacious presentation of many people's varied, often opposed, viewpoints taken in and on architecture over a quarter century make his effort most impressive. Why, then, has this book been unfavorably received by and large?

Professor Jacobus knows where he stands, but apparently he fails to see what it means. On page 207, in a revealing note (number 6 to Chapter IV) he draws attention to "a fundamental quarrel between what might be called the academic, historically oriented criticism of architecture and the pragmatic, professional, marketplace variety. There is, needless to say, a place and a role for each to play, though I suspect that the passage of time will always tend to vindicate the former."

Well, many intelligent and doughty minds are less sure. The classical texts of this critics' "quarrel," that underlies Jacobus' whole book, are brief enough to cite. In a famous series of articles in *The Architectural Review* in 1960, Reyner Banham, never one to wait for the passage of time, wrote (in the May issue) "architecture will have to be consciously . . . steered as it proceeds, and someone will have to plot its course continually. That someone is the historian." Recently in the same periodical (Mar. '67 issue) Professor Peter Collins complains, "historians . . . are concerned with little more than the classification of forms: chronologically, morphologically, or chrono-morphologically; . . . the majority . . . tend to be indifferent to the synthesis of forms/programmes/technology/environment. I do not despise the work of these scholars; but it is useless . . ."

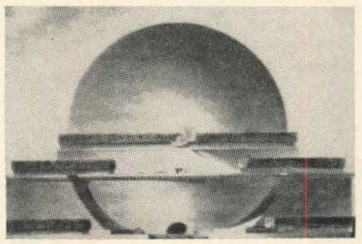
Now, Professor Jacobus takes his stand where Banham stood seven long years ago, but more weakly and dogmatically. He is a veritable phrenologist, searching patiently for the bump of beauty, or that of eclecticism, or regionalism, or asymmetry, etc., etc. To him, architecture has neither site nor performance, neither space nor significance, in any vital way. It is a matter of fixed appearances, such as can be slid in a projector. All the rest is relegated to the marketplace.

Of course it will not do to treat living architecture as if it were a laboratory preparation. Like Peter Collins one wishes for "a little less *Kunstwissenschaft* about . . . 'Wittkowerian or Palladian ideas' and a few quotations from the architects' initial specifications" (in *Progressive Architecture*, Mar. '67; this was a good month for Collins). Banham in 1960 at least wanted history to be a tool of architecture, not architecture a mere artifact of history. Yet these polemical positions, so beloved of certain dons including Jacobus, are not revealing; they merely serve to swell "the literature."

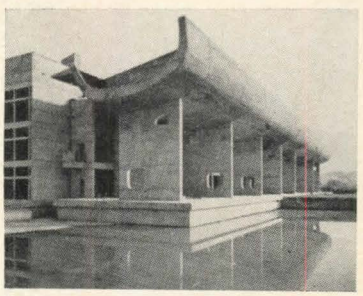
Before Jacobus, in 1963, Stanford Anderson, now at MIT, reviewed Banham's stand of 1960. His findings appeared in *The Architectural Association Journal* (May '65 issue). He saw history as a tool of architecture, but more profoundly than the others here quoted. Because I believe that his view is both right *and* necessary, and because it seems to indicate just what is lacking in Jacobus' new book, I'd like to close with a quote from that article. "Our best means for realizing our opportunities and for establishing and fulfilling our goals . . . is through an acute understanding of our tradition and of its influence



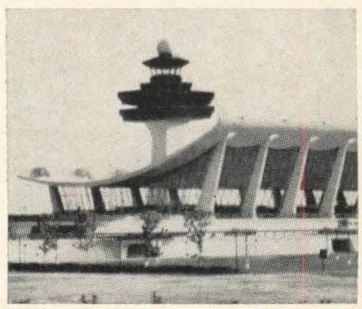
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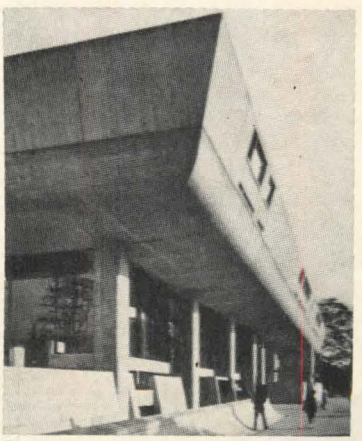
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Comparisons of architectural form by Jacobus. 1 and 2: Wright's Guggenheim Museum (1959) and a cenotaph proposal by Boullée (1784). 3, 4, and 5: Le Corbusier's Assembly Building, Chandigarh (1962); Saarinen's Dulles Airport (1962); and Mayekawa's Tokyo Festival Hall (1961).

Mr. Kaufmann, a member of the Forum's Board of Contributors, is adjunct professor of architecture at Columbia, and a frequent lecturer and author. He has been director of the Museum of Modern Art's department of industrial design and initiated its Good Design program.

upon us. . . . Our tradition not only does, but should, form a most important part of the context of our decision making." Jacobus' book portrays modern architecture and its tradition out of context.

WORLD ARCHITECTURE 3. Editor: John Donat. Published by the Viking Press, New York, N. Y. 215 pp. Illustrated. 9 by 11¼ in. $16.50.

Anyone looking for an encyclopedic record of the world's architecture over the past three years will not find it in the first three volumes of John Donat's annual, *World Architecture*. For, like any good periodical, each of his books gives concentrated attention to a few carefully chosen topics and projects.

And, as in a good periodical, the point of view shifts somewhat from number to number, without ever becoming seriously distorted. This third volume is subtitled *Art and technology: towards a third culture in architecture*—a culture that would reunite "Art and Science." The introductions to the first two volumes specifically dismissed technology as a secondary issue. "The real issues," Donat asserted in Volume 2, "are philosophical, not technological; not *how* to build but *what* to build." But as "system-architecture" comes to the fore, the relationship *between* how and what demands more attention.

Donat's exploration of this relationship ranges through the School Construction Systems Development project in the U.S. (FORUM, Apr. '65), "The Architecture of Assembly" as approached by several British designers, and the structural virtuosity of Tange's gymnasia in Tokyo. Canada is represented by a thorough coverage of Andrews' Scarborough University buildings (FORUM, May '66), a singularly successful merger of art and technology.

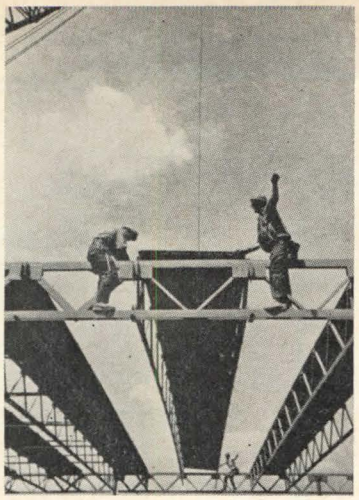
Achievements within *limited* technology are shown in a handsome portfolio of works by Doshi and Correa in India. An article on Ghana contrasts newly introduced techniques and living patterns with highly developed traditional building skills.

Donat has not made a straitjacket of his theme, however. A contribution from Italy concentrates on the work of Leonardo Savioli; the one from Finland, on Korhonen; the one from Sweden, on Lewerentz, a remarkably little-known colleague of Asplund. And there are few just plain good buildings.

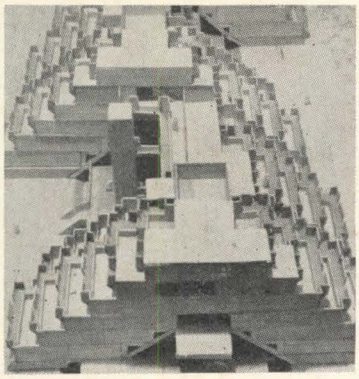
As editor of the series, Donat obviously has to depend on the contributing editors listed in each volume. This dependence can be blamed for the only significant defect in the series, its spotty geographic coverage. Although selective coverage is an outstanding virtue of the series, the word "World" in the title does carry some obligation to take up all major centers of activity at least once every few years.

In the first three volumes, nothing has appeared on work in Denmark, Czechoslovakia, Cuba, or Argentina, to cite a few fairly productive countries; out of the whole African continent, only Ghana, Mozambique, and South Africa have been represented. The U.S.S.R. was covered in Volume 2; China not at all. It was not until Volume 3 that anything from Australia or India was shown.

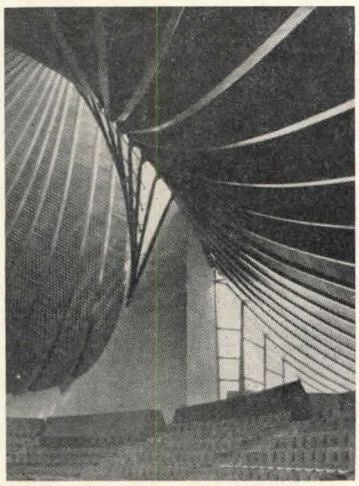
Donat has probably sacrificed geographical completeness in favor of quality among the individual articles, for there are remarkably few weak ones. The depth and selectivity of the articles is enhanced by handsome layouts, designed for clear communication. Photographs are good and well reproduced; text is concise and well edited. These assets—rare in architectural literature—have made the series a valuable one for professionals, although it was intended mainly for laymen. —J.M.D.



1



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World architecture related to building technology. 1. School Construction System being assembled (U.S.A.). 2. industrialized housing propcsal by Lindsay (Great Britain). 3. National Gymnasium by Tange (Japan). 4. Museum and center for Gandhian studies by Correa (India).



THE LEVITTOWNERS. Ways of Life and Politics in a New Suburban Community. By Herbert J. Gans. Published by Pantheon Books Division of Random House Inc., New York, N. Y. xxix + 474 pp. 6½ by 9½ in. $7.95.

REVIEWED BY ROGER MONTGOMERY

For professionals concerned with shaping American cities, *The Levittowners* ought to be book of the year, and several more years to come. In it Professor Gans reports on a broad study of sprawl as a way of life. It uses accepted social science methods in contrast to the journalistic impressionism of most so-called studies of suburbia. Its scientific basis makes its conclusions so important. Architects, whose intuition violently contradicts Gans's findings, must squarely face *The Levittowners* conclusion: *"It is much less important to plan for new or improved suburban communities than to make sure that more people are able to live in suburbs like those now being built."*

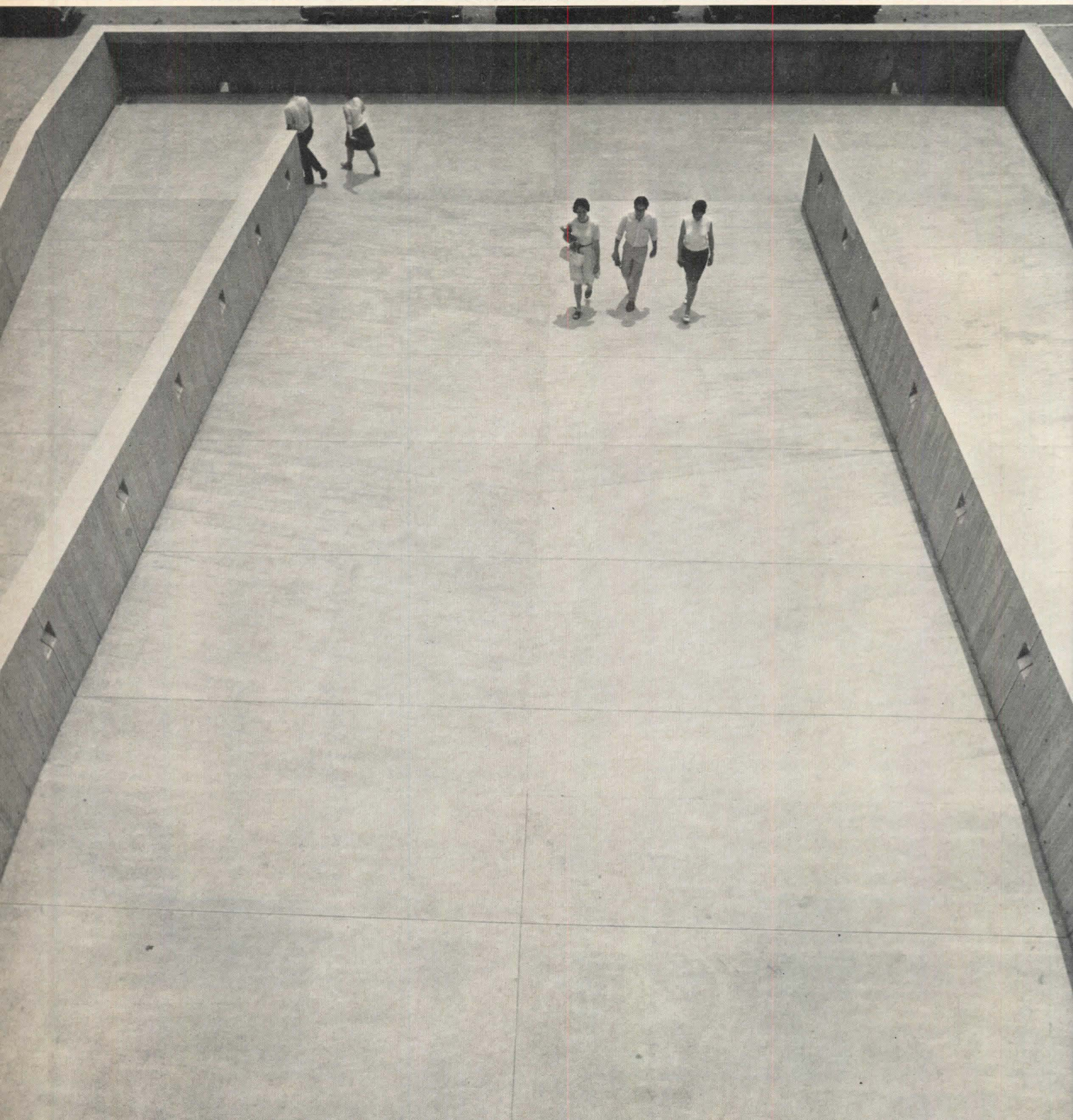
This statement, and scores more like it, makes fearfully clear how large a gap divides architects and social scientists in their perceptions of the good life to be nurtured in urban America. This is what the book was intended to do. In the introduction Gans writes, ". . . my observations . . . persuaded me neither that there was much change in people when they

(continued on page 132)

Mr. Montgomery is the Forum's correspondent in the Midwest. He is also director of the urban renewal design study, School of Architecture, Washington University, St. Louis.

DUQUESNE

dramatic change in campus scale



BY WILLIAM R. COOPER

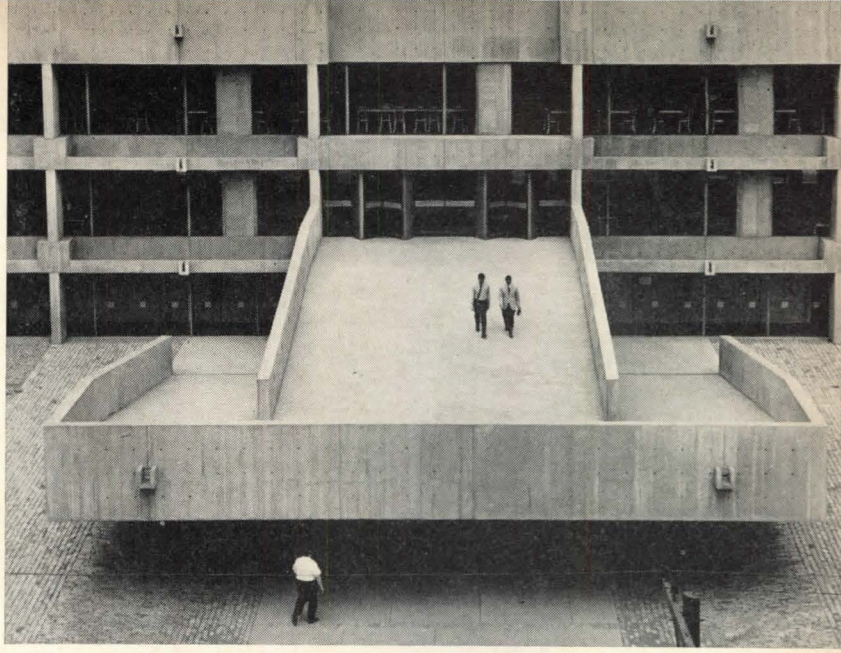
Seldom have two new buildings so thoroughly altered the character of an established campus as have Paul Schweikher's Student Union and Mies van der Rohe's Science Center at Duquesne University in Pittsburgh.

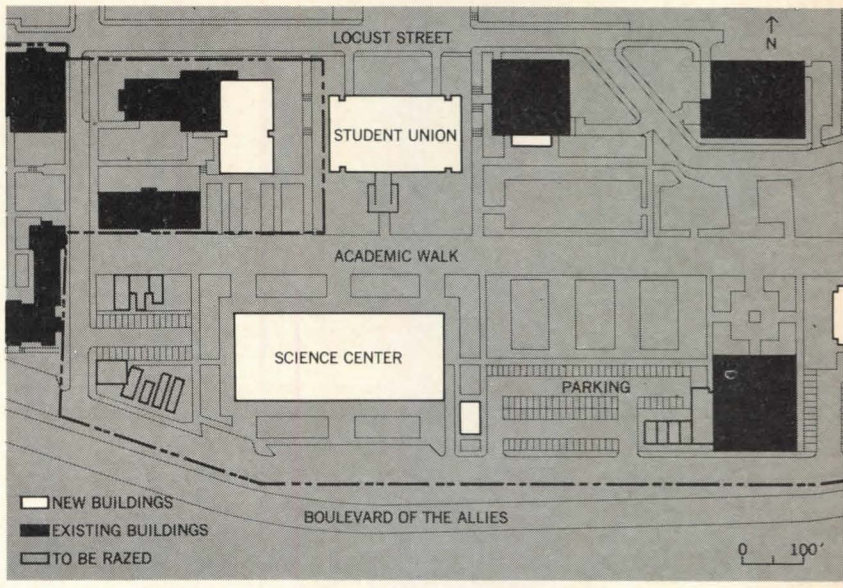
Duquesne was established in 1879 by the Catholic Holy Ghost Fathers in a single building high on a steep bluff overlooking downtown Pittsburgh, and ever since most of its expansion needs have been met by acquiring a series of aging houses nearby and converting them to its use, giving the campus the look of a slightly seedy residential enclave. Now, with the recently completed Student Union (presented on these and the following pages) and the nearly completed Science Center, Duquesne suddenly is beginning to look like the 7,000-student urban university that it is.

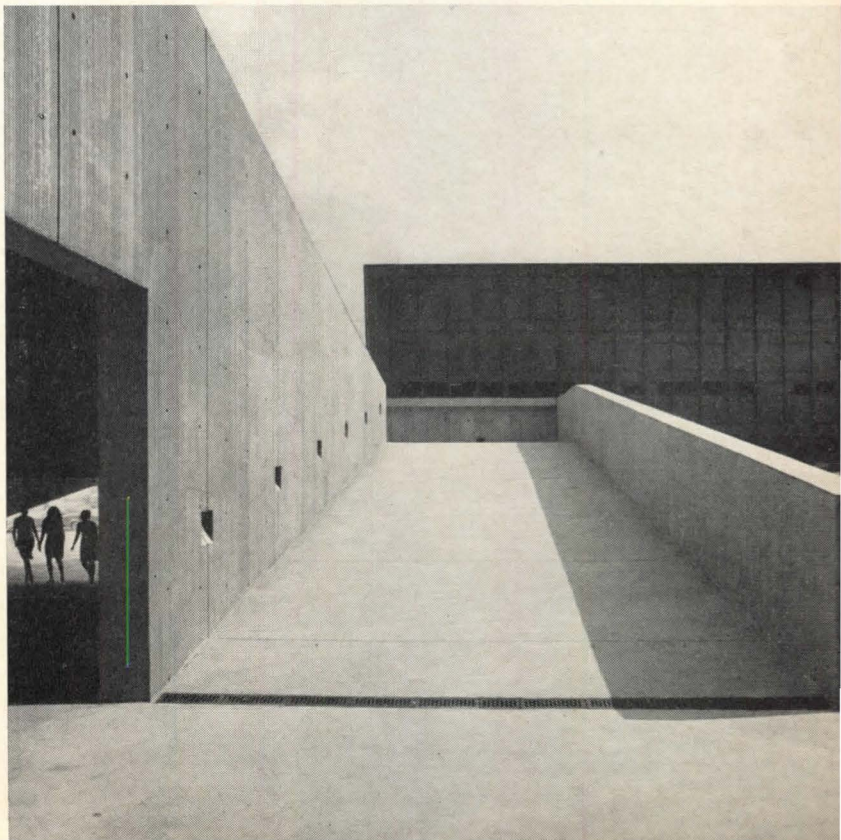
The two buildings are the first executed elements of an ambitious master plan, designed as an urban redevelopment project, which eventually will restructure the entire Duquesne campus (right). Schweikher, head of the department of architecture at nearby Carnegie Tech, was awarded the commission to design the Student Union in the fall of 1962—and was promptly asked by the university if he could help in persuading his friend Mies to accept the design commission for the Science Center. Mies agreed, provided Schweikher's firm would serve as supervising architects.

Jack O'Carroll, director of Duquesne's department of planning and construction, states that "no locked-in style," but rather "a diverse architecture, related by landscaping," was desired for the two buildings. Diverse they are: Schweikher's Student Union designed in burly concrete, Mies's Science Center in crisp steel and glass.

But they also are complimentary, partly because the design of both is based on a 28-ft. longitudinal module. And they should become even more compatible when, as planned, the vehicular street that now separates them is turned into a landscaped "academic walk."

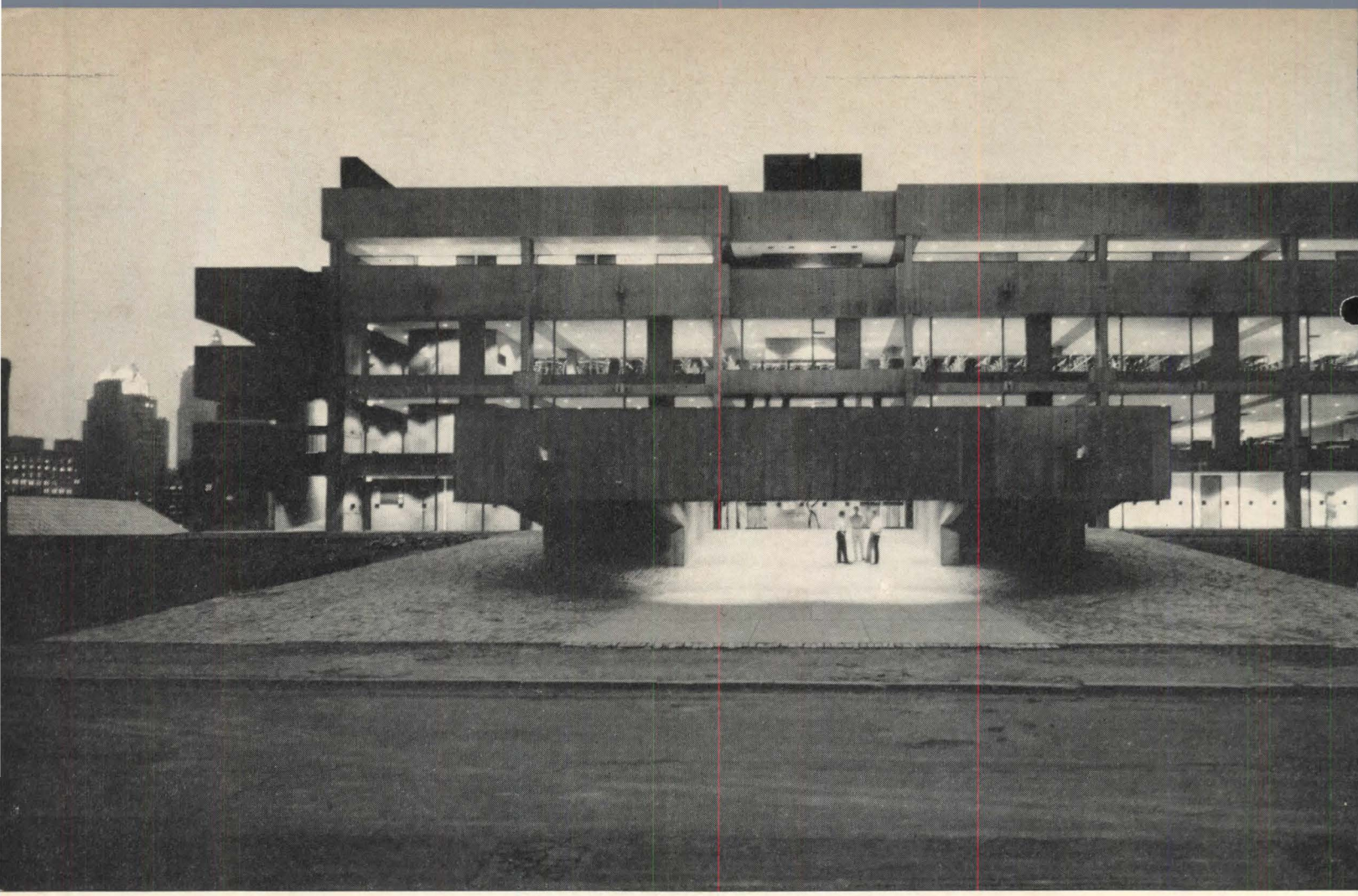


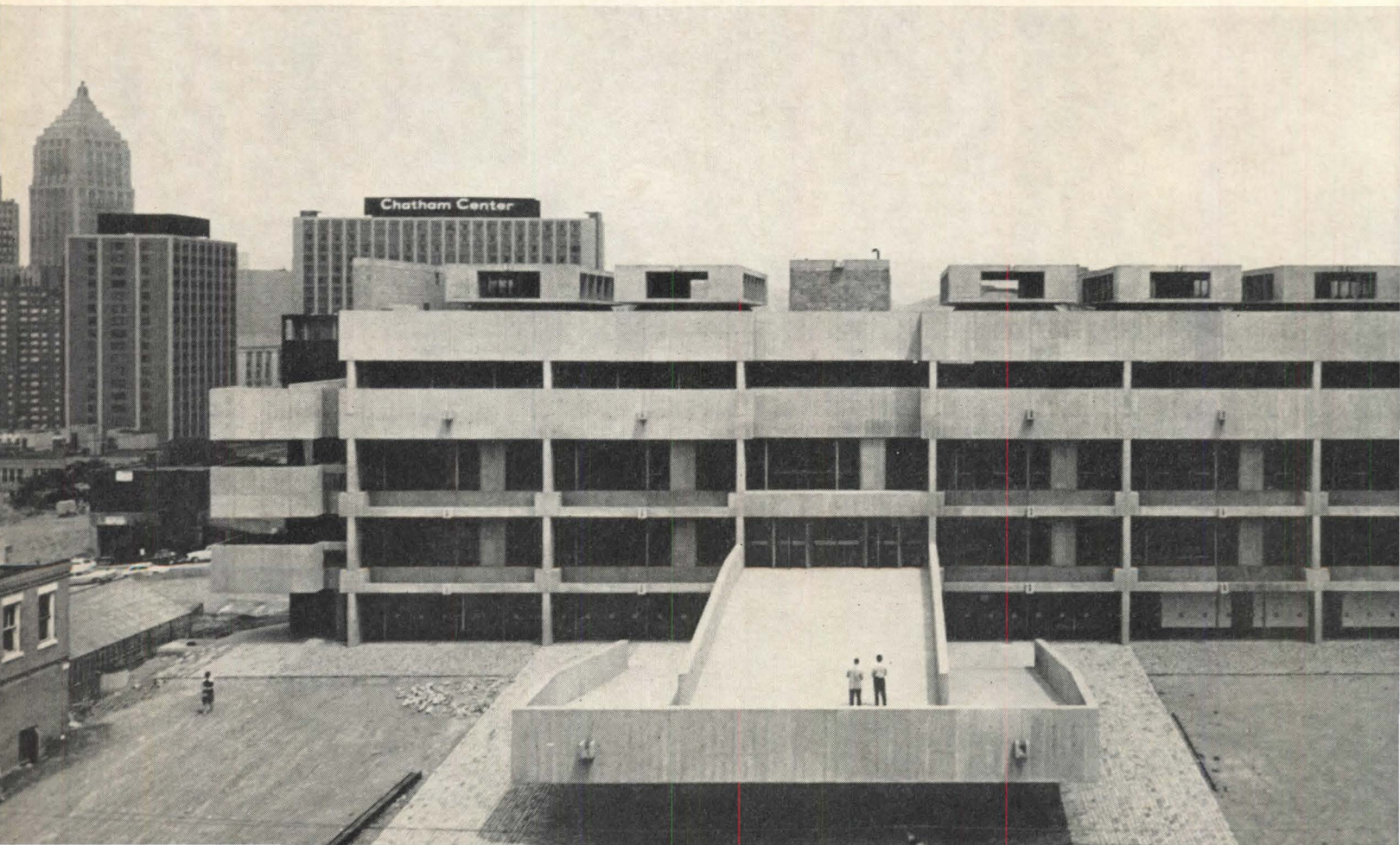


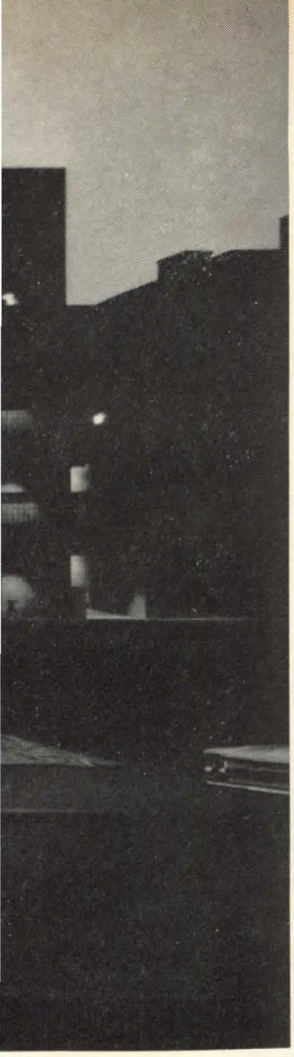


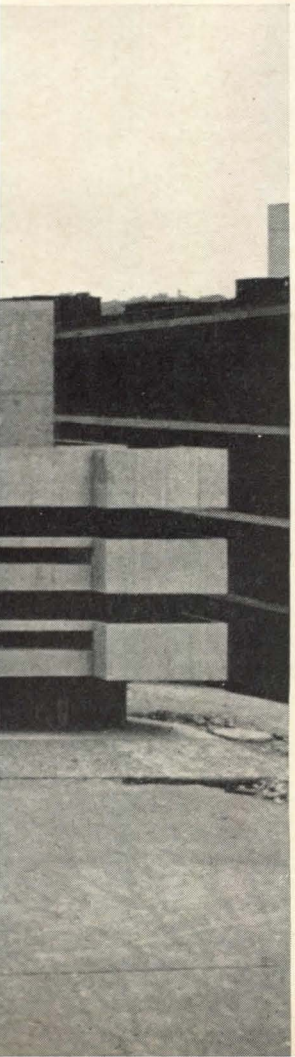
Entrance to Duquesne University's new Student Union is via a massive concrete ramp that cantilevers 28 ft. from its base (top right and detail at left). The building is the first to be completed under a master plan for redevelopment of the campus (center right). Across from the Student Union is the nearly completed Science Center (right) designed by Mies van der Rohe.

William R. Cooper is a graduate of Pittsburgh's Carnegie Tech, a registered architect, and currently a planner for the Redevelopment Authority of Allegheny County.

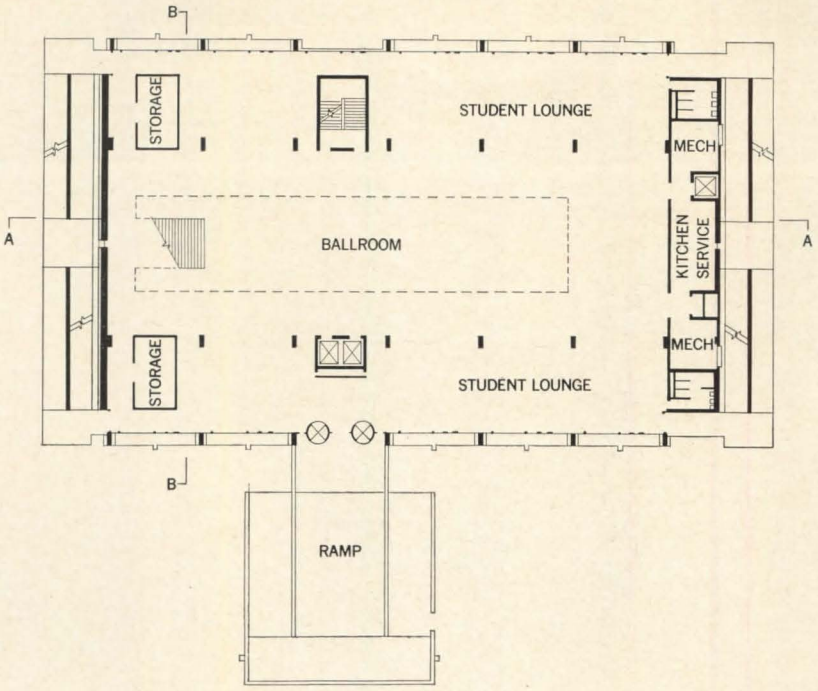


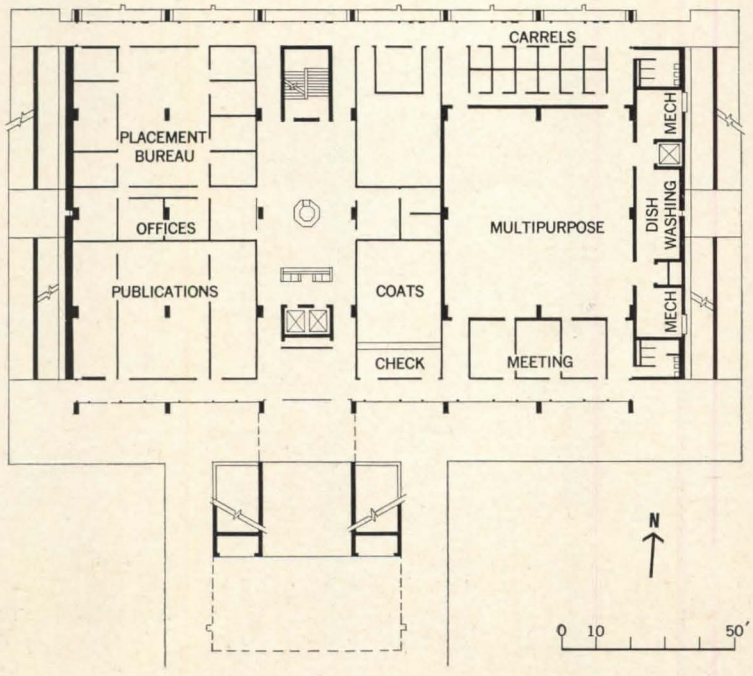

Chatham Center





THE CONCEPT





The central activity area of the Student Union is at the fourth level, which contains a central ballroom and flanking lounge areas (plan at top) and is reached from atop the ramp. Access to the third level (plan above) is from underneath the ramp (night view, top left). The five monitors above the roof (left) bring light into the interior well of the building.

Schweikher based his design of Duquesne's Student Union on a classical symmetrical scheme: a simple rectangle consisting of six transverse bays with a scissor ramp linked to each side.

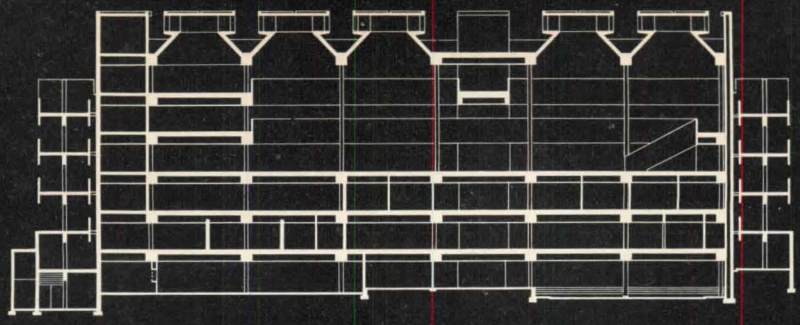
The basic form is offset on the east, where he introduced a 15-ft.-wide mechanical bay (housing kitchen service cores, toilets, ducts, and mechanical equipment rooms) between the building and ramp. The resulting asymmetry is balanced, however, by the third bay on the west, which has been turned into the entrance bay, accented by the elimination of window ledges and, of course, by the cantilevered (28 ft.) entrance ramp.

The massive ramp is an outgrowth of building code exit requirements for the fourth level of the Student Union, which consists entirely of a lounge and ballroom area (floor plan, above left), where as many as 1,500 can be seated for banquets. The ramp emerges as the entrance "voice" of the building, and it is especially appropriate at noon hour, when there is a large influx of students and faculty for lunch and leisure. When the campus yard is complete, the ramp may be used for commencement exercises.

The ramp also announces the third-level concourse bay just below the ballroom floor. Its entrance is located underneath the cantilever at grade on the central campus side (see night photo, left). The concourse contains space for most of the student organizations and serves to separate the career planning and placement center from a block which houses student organization rooms surrounding a multipurpose room (floor plan, left).

The floor beneath the concourse level, which is at grade on the north side of the building, contains a bookstore and a central kitchen, separated by an entrance concourse.

The lowest level, situated entirely below grade, is the recreation area. It houses a Rathskeller (floored with end-grain wood blocks), pocket billiards tables, bowling lanes, music and crafts rooms, dispensary, and office lounges.



SECTION A—A

THE CORE

The ballroom of the Student Union can accurately be called "grand": it rests in a soaring three-story well (photo below right) that culminates in a lofty ceiling monitored by five large skylights atop the roof.

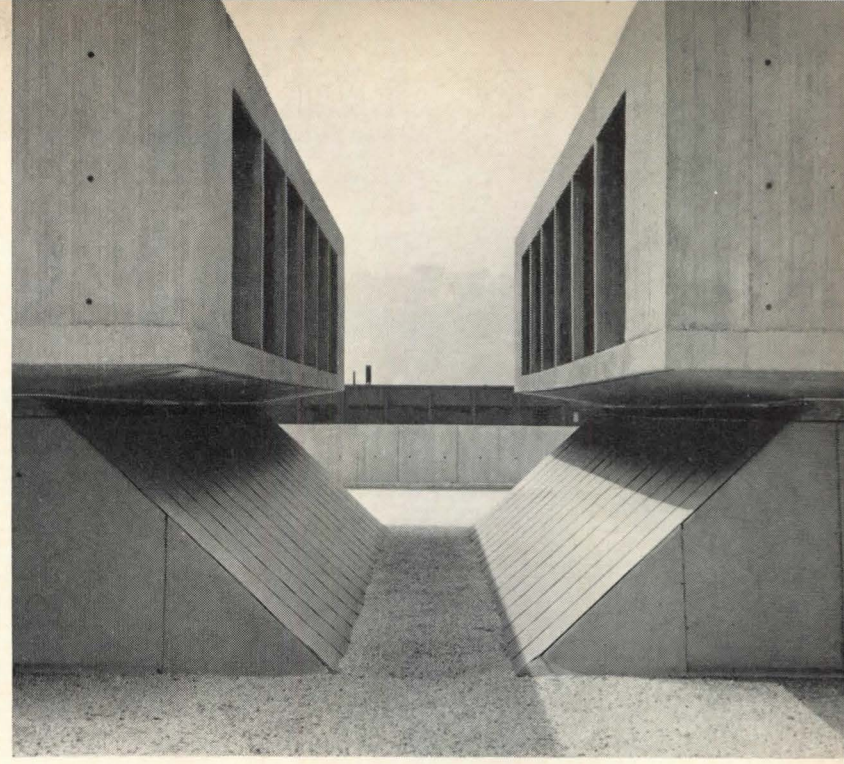
Unlike most rooms of its type, which usually are wrapped in mothballs and used only for special occasions, the ballroom is the central activity area of the building. Its location at the center of the well, flanked by student lounges under the overhanging floor above, makes it an ideal space for such nonceremonial functions as concerts, exhibitions, and lectures.

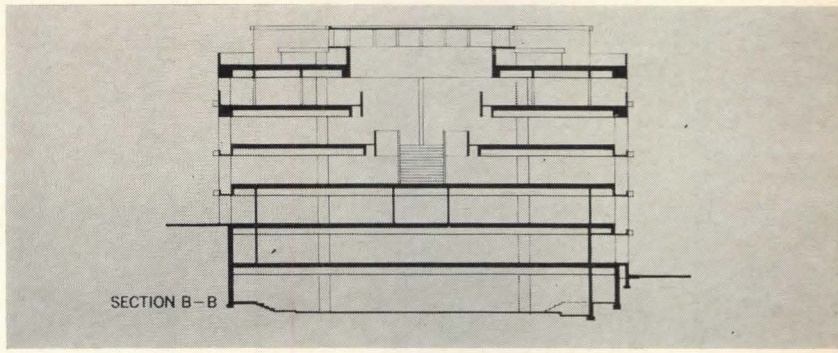
The student dining room, which seats 1,000, occupies the entire fifth level just above the ballroom. From here, excellent views are offered of the Pittsburgh skyline on one side and Mies's new Science Center on the other. The dining area is furnished with round and rectangular oak tables and black upholstered bentwood chairs, giving it a variety of seating arrangements that help to overcome the usual monotonous cafeteria atmosphere.

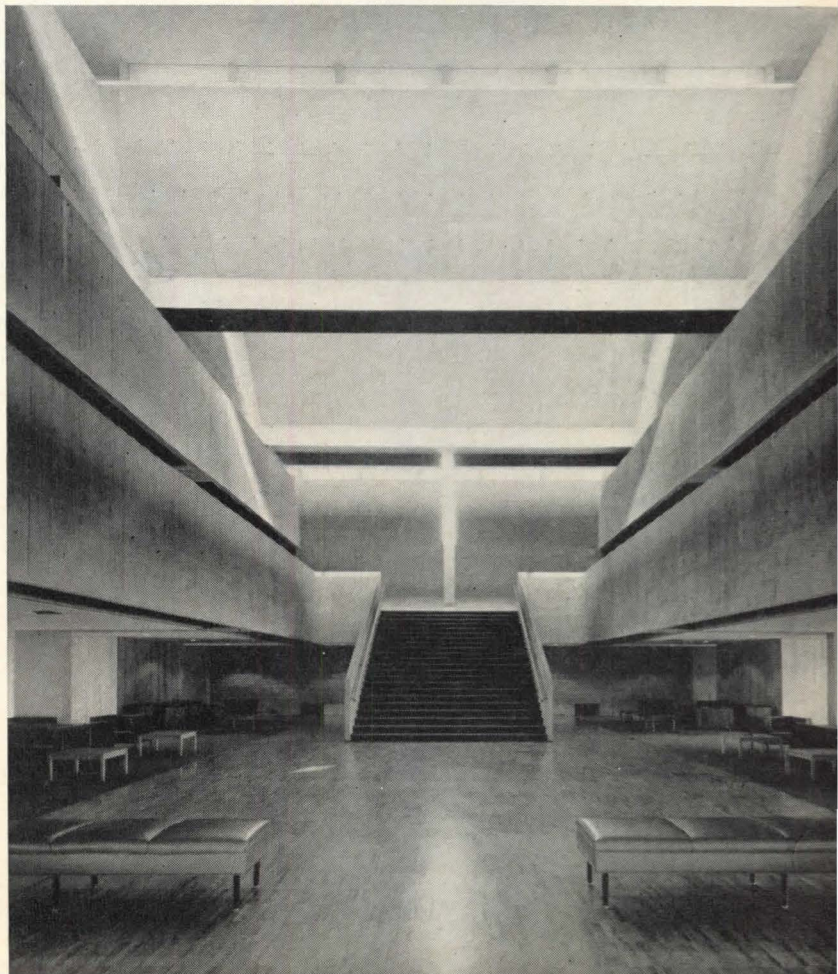
The sixth and highest level is primarily for the faculty and staff. It contains faculty lounge and dining areas, facilities for entertaining VIPs, student welfare service, and all-purpose meeting rooms. Exterior balconies extend the length of this level on both sides.

The ceiling over the three-story well would do justice to a cathedral. It was formed by converting the exposed transverse beams into V-beams, extending the Vs above the roof, and bridging them with the five clerestory light monitors. Besides serving their function of permitting light to pour obliquely inside, they give the building a commanding roofline (Hanno Weber, the project coordinator, calls the five monitors "the Maginot Line").

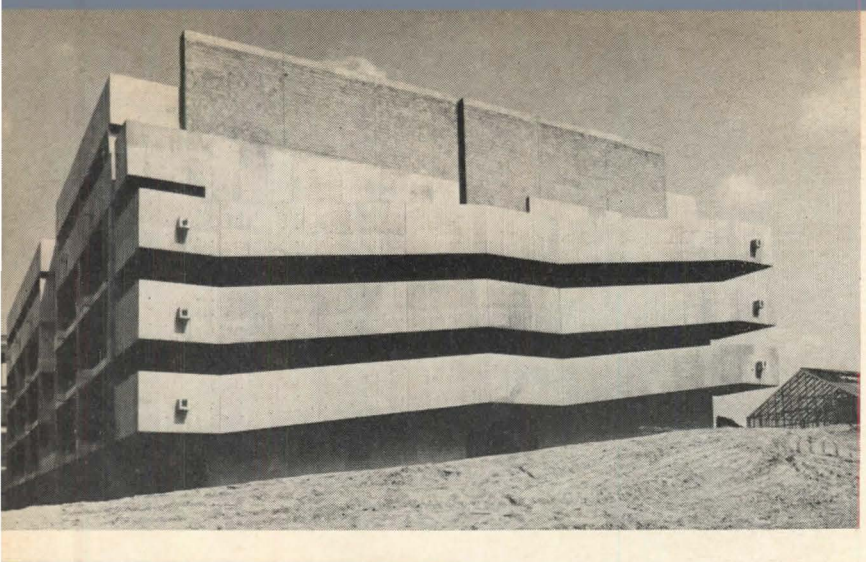
At night, strong spotlights are directed on the ceilings of the monitors, which reflect the light down onto the beams. Thus, day and night, the high ceiling is a powerful culmination of the interior space.

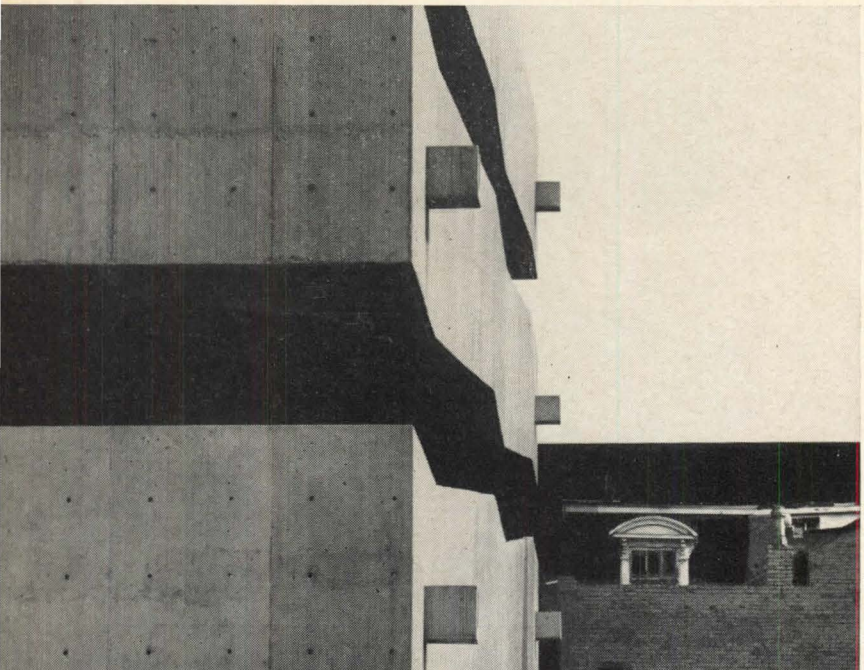


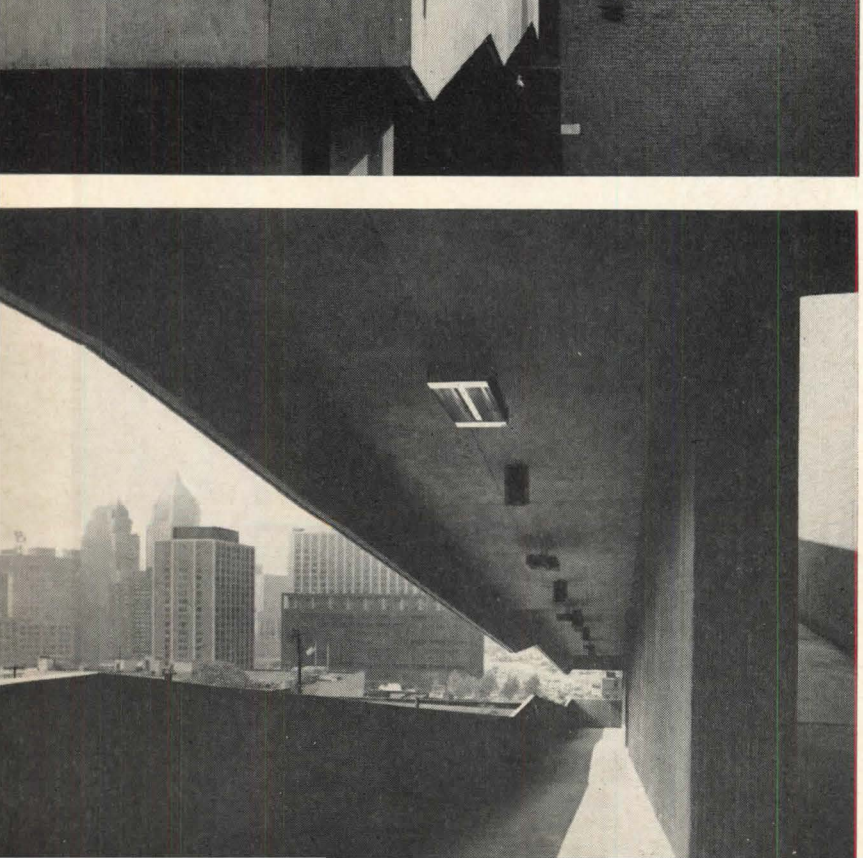




The lofty ceiling of the Student Union (photo and section left) is made up of a series of V-beams that are enclosed by light monitors above the roof (top right). The ceiling rises above an interior well containing two balconied levels overlooking the ballroom (section and photo right).







Concrete, glass, and oak (in the form of access panels for window washing) compose the facades on the front (opposite) and rear. On the sides are great scissor ramps structurally independent of the building (left top and center). A wide balcony off the sixth-floor faculty area (left) doubles as a sunshade for the floors below.

FACTS AND FIGURES

Duquesne University Student Union, Pittsburgh, Penn. Owner: Duquesne University of the Holy Ghost. Architects: Paul Schweikher *Associates* (Hanno Weber, associate, project coordinator). Engineers: Richard M. Gensert & Associates (structural); Dodson Engineering, Inc. (mechanical); Frank T. Wadlow (electrical). Food service consultant: James McFarland & Associates. Contractor: Navarro Corp. Building area: 137,744 sq. ft. Cost: $2,882,494.25 (including site work and fixed equipment; excluding landscaping and moveable furniture).
PHOTOGRAPHS: Orlando Cabanban.

THE STRUCTURE

All of the concrete used in the Student Union, including copings and lintels, is poured in place and reinforced with high-strength steel (60,000 psi). The surface of the concrete has been softened by the use of striated plywood formwork and a buff coloring additive.

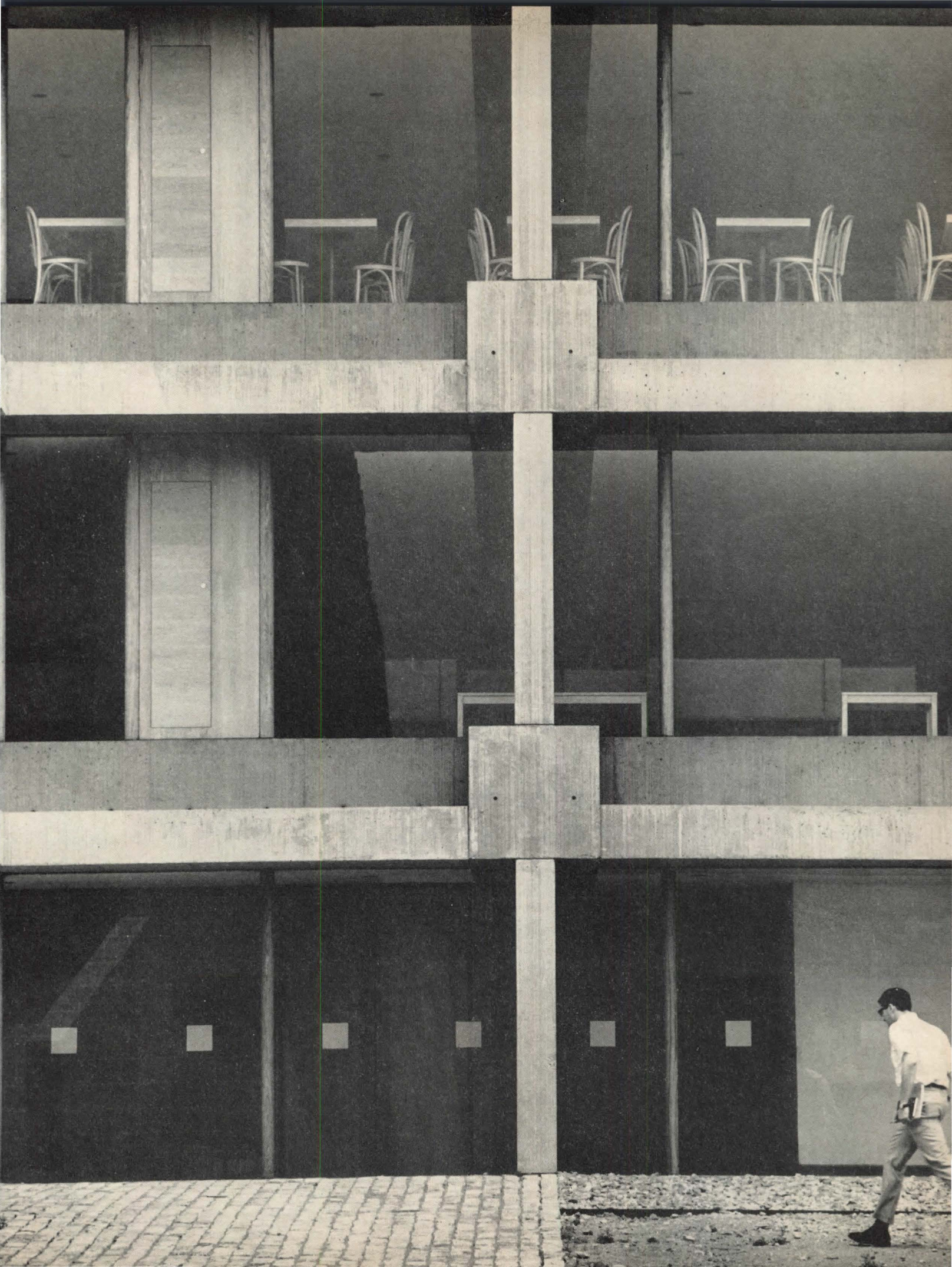
As one approaches the building, the concrete looks weathered. The striated surfaces give warmth to the concrete masses. The striations also control weathering, spalling, and cracking. Some 15 surface samples were considered during the course of design. The striated surface proved to be not only the handsomest and most practical solution, but also the most economical.

Slender rectangular columns boldly support each 3 ft. 4 in. square transverse beam (opposite). This juncture of beam and column dominates the front and rear facades. Between beams is a pan construction floor joist system. Oak access panels set in the glass wall open to window ledges (for window cleaning) and serve as emergency ventilation in case of mechanical breakdown. The window ledges also provide sun and weather protection for the windows below; and they give a sense of security when one stands next to the glass wall.

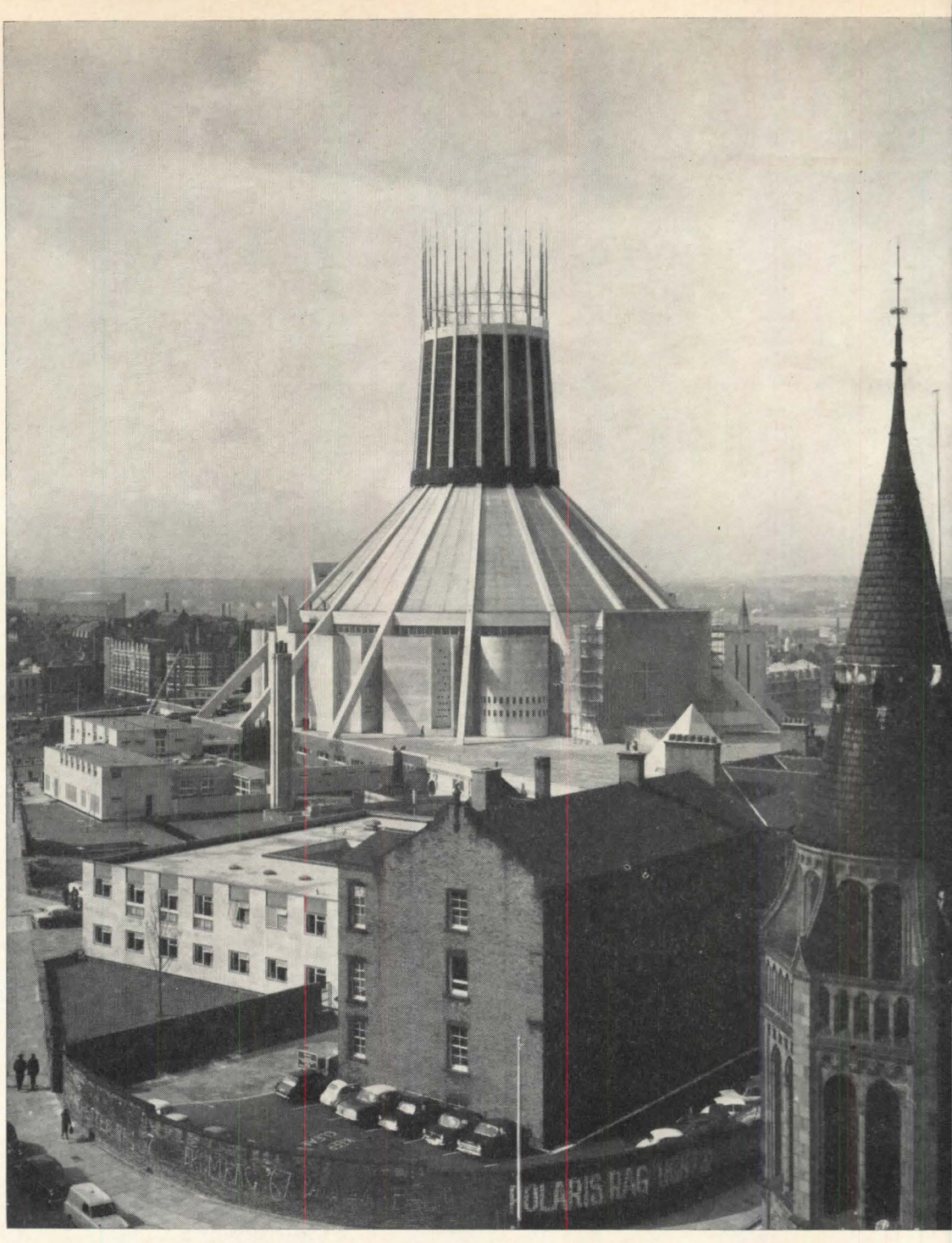
The scissor ramps, which satisfy all code exit requirements, are independent structures. Cantilevered from center bearing walls, they are linked to the main structure for lateral support. The outer 4-in. fin walls act as stiffeners for the ramp slabs.

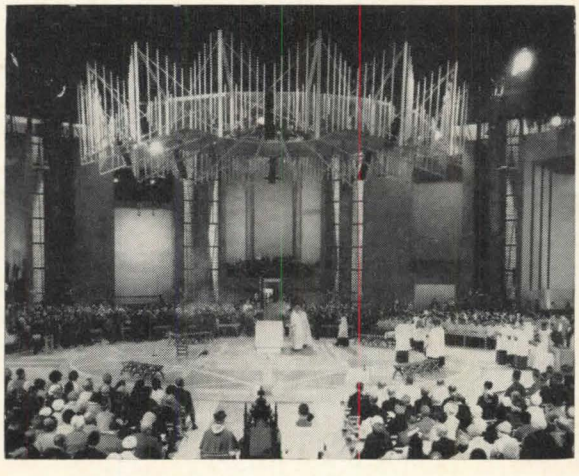
The building is simple and direct—qualities that are becoming ever harder to achieve with the increasing complexity of building types, mechanical appurtenances, and codes—and increasing costs.

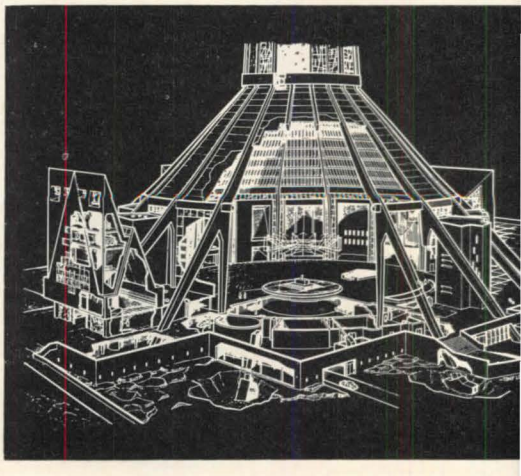
"Usefulness is essential to the design process," Schweikher has written. "It does not inhibit beauty, rather it is a challenge, stimulating invention and insuring importance to the most modest venture." The Student Union is a striking embodiment of Schweikher's words.



FOCUS

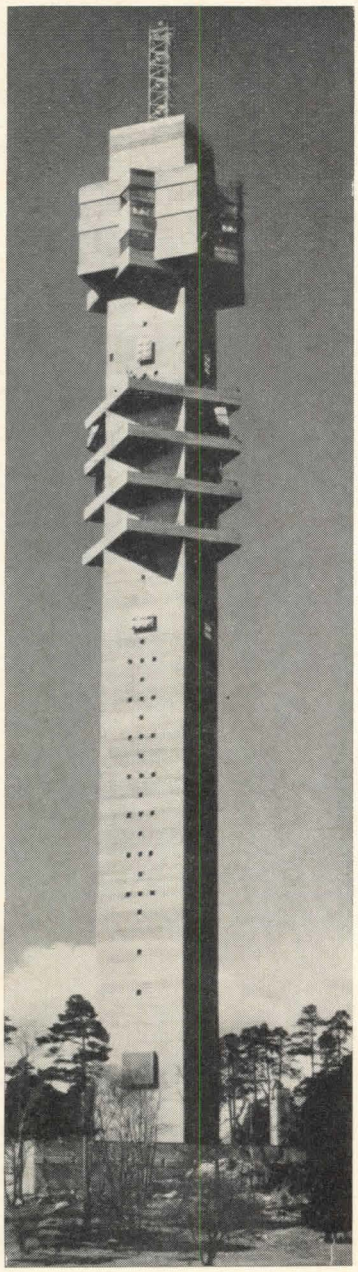






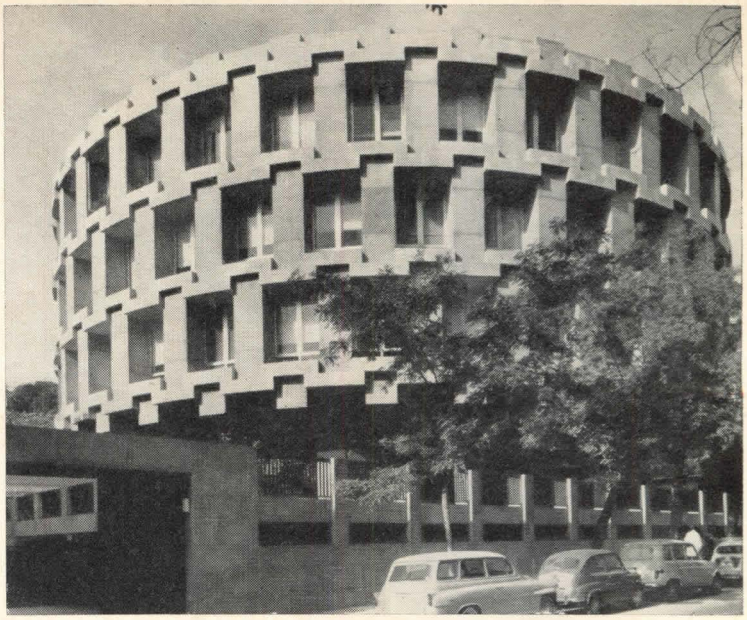
SWEDISH NEEDLE

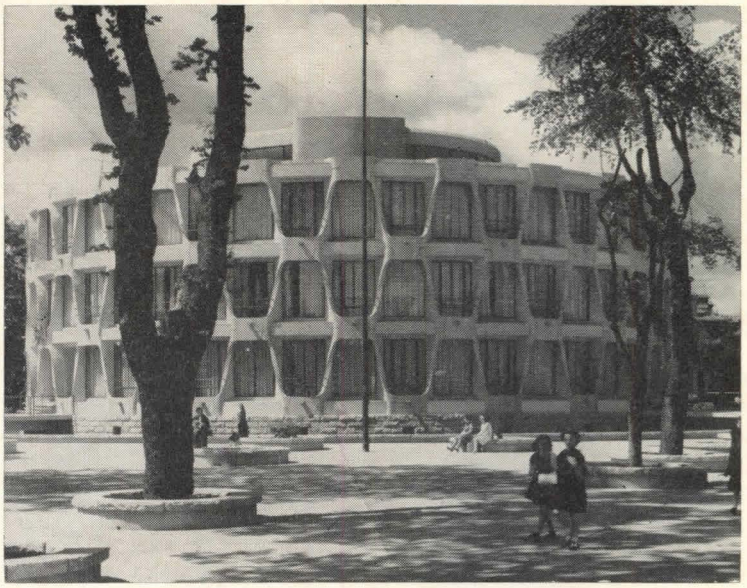
A gray concrete communications tower rising 5,000 ft. above lush green Djurgarden Park will provide two vital functions for Stockholm: a transmission post for radio, TV, and telephone; and observation platforms for tourists. The obelisk, designed by architects Hans Borgstrom and Bengt Lindroos, is bisected by four quadratic balconies for radio antennae and three octagonal terraces which command a view of Stockholm's archipelago. One terrace houses the Belloptikon, a restaurant for 200. The balconies placed diagonally to the tower's main shaft, provide a constantly changing interplay of light and shadow.



ACE-AGE CATHEDRAL ENTRANT

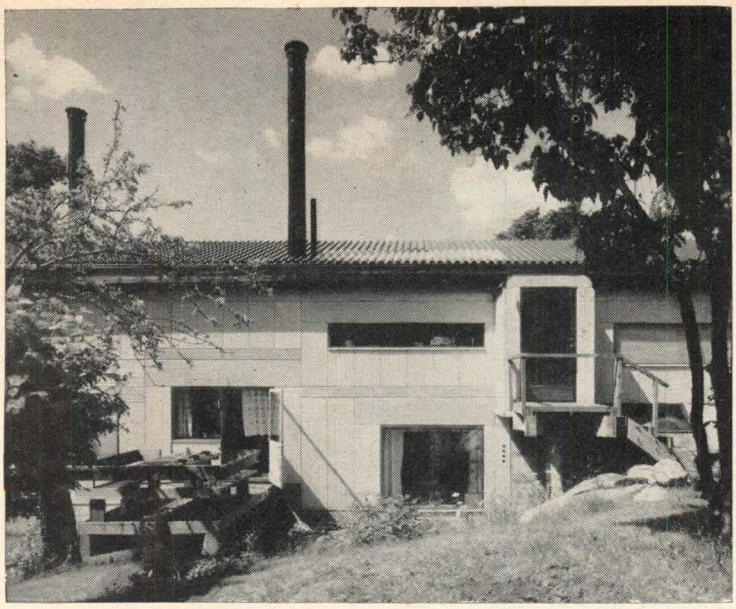
es prophetically warned in 24, there will be no cathe- ls built in our time. One ace-age entrant which proves es right in spirit if not in stance, is the Metropolitan thedral of Christ the King oman Catholic) in Liver- ol. This 20th-century creation, licated in May, is the prize- nning entry of Frederick berd who also designed Lon- n's Heathrow Airport and the w town of Harlow. Gibberd de the pure white marble ar the center of his concrete m and bathed it in light m a stained glass tower which es 225 ft. above it. His n offers 2,000 worshipers an molested view of the altar. teen freestanding chapels are med by radiating, prestressed crete flying buttresses.





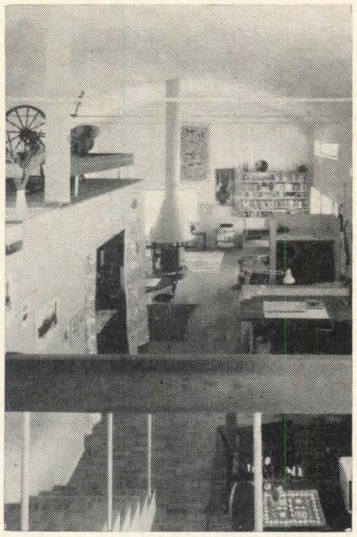
EMBASSIES IN THE ROUND

The new British Embassy which opened in Madrid this year (top), designed by Architect W. S. Bryant and his associate, L. Blanco Soler, bears a striking resemblance to John Johansen's U. S. Embassy in Dublin completed in 1964 (above). Both drum-shaped structures are located in once-fashionable residential areas, have major parking problems, and are punctured by an inner central courtyard. There similarities end. Johansen's drum shape was dictated by a pie-shaped wedge of land; Bryant's by God knows what. Johansen left his precast concrete exposed; Bryant faced his with exposed aggregate, Segovia granite, and pink limestone. Johansen ran his cars underground beneath his drum; Bryant put his drum on stilts and garaged cars underneath. Johansen enclosed his center courtyard with a clerestory; Bryant's is open with a marble wedding-cake fountain bubbling in the middle. If God is in the details, Johansen deserves a halo.



ARCHITECT'S COMPOUND

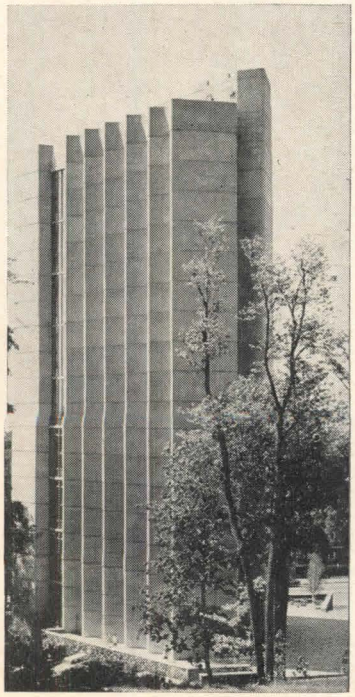
Expatriate Englishman Ralph Erskine has stashed his wife, three children, and an *ad hoc* architectural practice into a courtyard arrangement of house, indoor sauna, outdoor snow bath, and office. For the house and office, Erskine used materials (prefabricated seamed concrete walls and galvanized corrugated steel roofing, coated on the outside with black plastic) congenial to the pale yellow brick-and-plaster architecture of Drottningholm, the 18th-century palace town near Stockholm where the Erskines live.



PALEY'S POCKET PARK

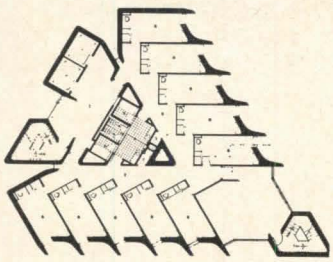
City life denies many serenities, among them fresh air, sunlight, and repose. Paley Park, a 42 by 100 ft. retreat in the heart of Manhattan makes a modest stab at providing all three. Located on the site of that once-glittering bistro of Café Society, The Stork Club, the new park provides potted geraniums, a canopy of honey locust trees, Bertoia chairs, and the park's *pièce de résistance,* a waterfall. Landscape Architects Zion and Breen masterfully masked the city's noise with their 20-ft. water wall at the rear of the parklet, which recirculates 1,500 gallons of water an hour (with a daily evaporation of 36 gallons), and provides a semblance of bucolic sounds for parched city dwellers. CBS Board Chairman William S. Paley donated the park in memory of his father, Samuel Paley.

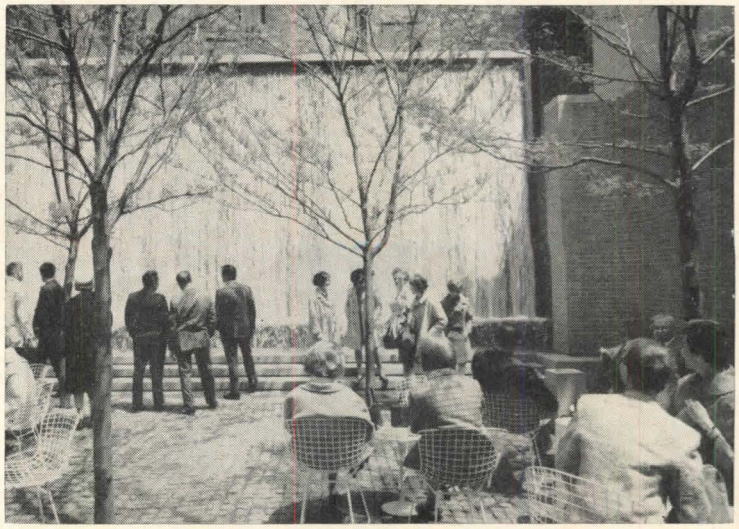


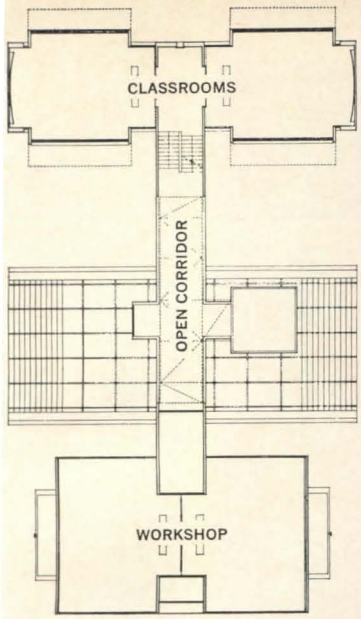


ALSO IN MONTREAL

The wedge shape of the women's dormitory at the University of Montreal was determined by two converging axes: Maplewood Avenue and existing campus buildings. The monolithic concrete corrugation is repeated around the perimeter of the 17-story building. The dormitory is the design of Papineau, Gérin-Lajoie and LeBlanc, architects of Expo's smashing architectural dark horse, the Quebec Pavilion.

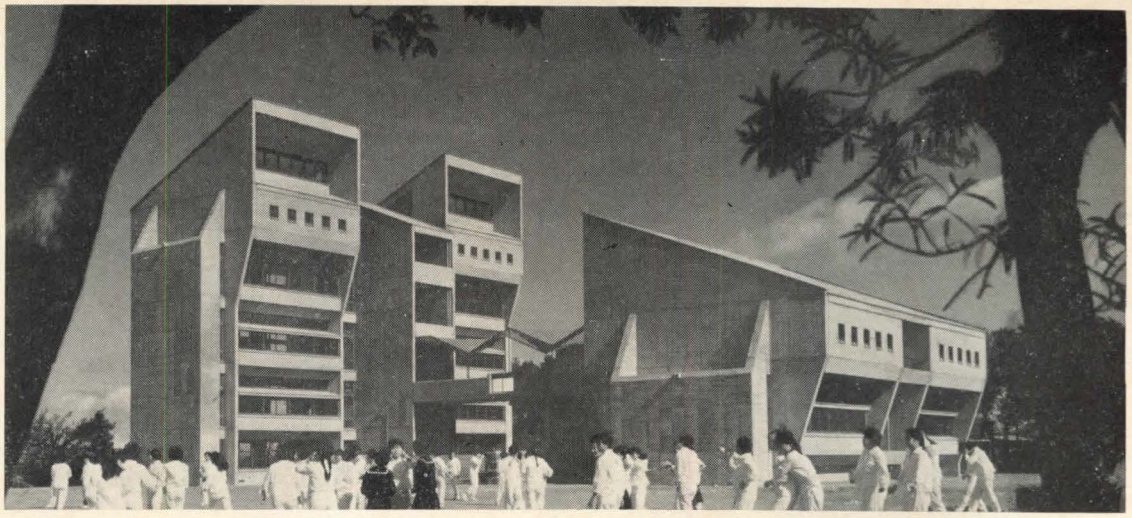


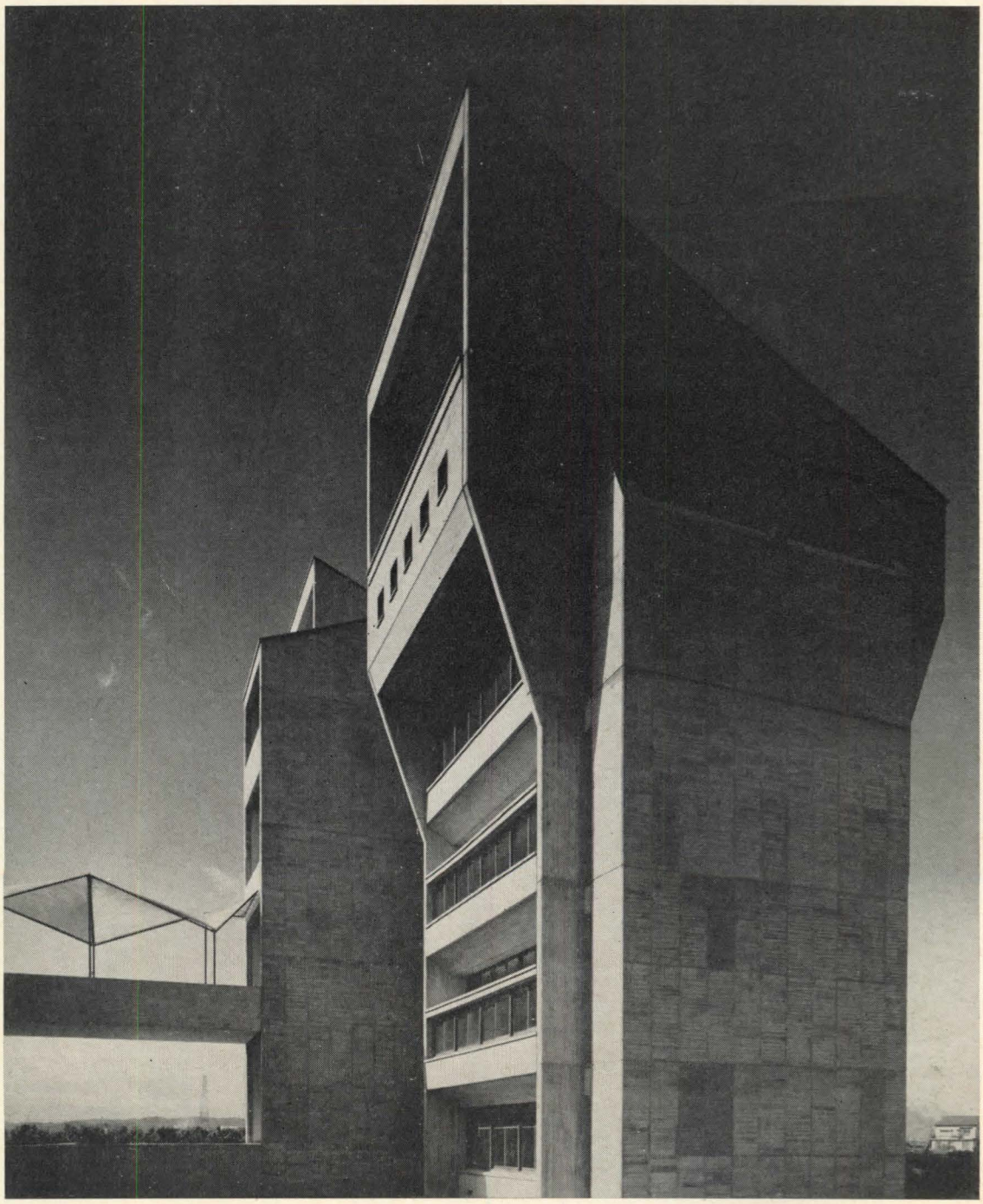




<TSU-I> AND <MA>

In describing his powerful pair of concrete buildings, which house classrooms and workshops of the girls' high school in Oita, Japan, Architect Arata Isozaki writes as follows: "To make <Tsu-I> (a pair) is the same thing as to make <MA> (imaginary space). From the beginning we intended that the buildings <Tsu-I> is as gathering place and the in-between realm <MA> as circulation. If these buildings have an expression that they are talking to each other, that just because of <MA> . . . . I, as designer of this school, am only expecting that the concrete skin starts to breath to the air and to the sunlight." End of description.





BERKELEY

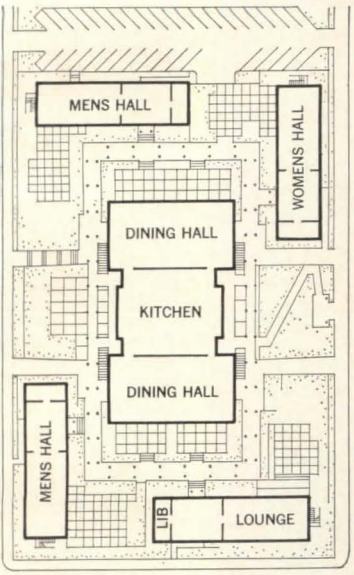
how do students really live?

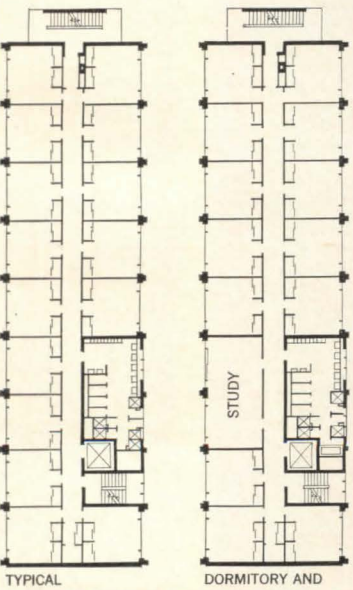


BY SIM VAN DER RYN
AND MURRAY SILVERSTEIN

"During the current decade, colleges and universities will have to add to their existing residential facilities about one and a half million units—enough to house the combined populations of Boston and Cleveland. . . . A $6 billion price tag is entirely possible."

—1961 report from the Educational Facilities Laboratories (EFL) of the Ford Foundation.





TYPICAL DORMITORY FLOOR

DORMITORY AND STUDY FLOOR

Site plan of dormitory complex at Berkeley, and typical dormitory floor plans. This study is based primarily on research conducted in these dorms. The buildings, while apparently deficient in certain functional respects, have won awards for their esthetic qualities.

Since these words were written, about 750,000 new units costing some $5 billion have been added to the one million units that were occupied in 1960. The statistics are impressive. But what have dollars bought besides a roof over the heads of the growing college population? How are the buildings used? What is their effect on student activities?

Administrators have been so preoccupied with problems of growth, cost, and budgets that basic assumptions of student housing design have seldom been questioned. There is no feedback: existing facilities have not been systematically evaluated as to whether they are effectively providing the kind of environment students want and need.

The story on these pages tells of a systematic evaluation of one typical student dormitory. The study was supported with funds from EFL.

Our emphasis was on evaluating *qualitative* aspects of student housing. We tried to go beyond quantitative measures of building performance such as temperature, lighting levels, and noise control, and to develop an approach to architectural programming that went beyond a catalog of square footage requirements. In a typical building program, space-use and square footage requirements are superimposed onto complex social patterns and activities. Our focus was on the silent partner in the design process—the user affected by design decisions.

Institutional clients rely on building committees to represent the user's point of view. Such committees, however, are often far removed from the needs and values of those who actually use the building. In the multiversity, one agency may be responsible for financing, another for planning, and a third for operating the facility. The dormitory construction program for the State University of New York, for example, involves at least five groups of design decision makers, each with organization loyalties, concerns, and criteria of their own. In such a planning framework, maintaining lines of communication becomes a major effort. The user is reduced to an ideal in the mind's eye; whether he is a college student, secretary, or hospital patient, his needs remain obscure to the administration and the architect.

Prizewinner under study

The subject of our study was the award-winning, high-rise dorm complex in Berkeley — a well-fashioned product typical of much of the student housing built by large institutions in the past 15 years.

The Berkeley complex consists of four self-centered, nine-story buildings arranged on the periphery of the site, in pinwheel fashion (see plan). A continuous covered walkway surrounds the central building which contains dining commons on the ground level and recreation rooms, courtyards, offices, and trunk storage on the lower level. The main floor of each unit is divided into lobby, main lounge or "living room," library, and three multipurpose rooms (now called "date rooms"). The eight floors above house 210 students in 12 double rooms per floor. Each room is approximately 14 ft. by 12 ft., with a picture window and two fixed closets. A common bathroom serves each floor.

Despite long waiting lists in the fall of 1963, many students began to move out of the dorms in the spring of 1964. The Housing Office cited three reasons for spring vacancy rates: students leaving the university, pledging by fraternity and sorority houses, and moves to cheaper accommodations.

By February, 1965, the vacancy rate had risen to a critical 10 per cent. Since vacancies had never exceeded 1 per cent during the fall semester, the university and local press interviewed residents and former residents to discover the cause. Press interviews indicated that women preferred the amenities of apartment life to the general regimentation and lack of privacy and freedom found in residence halls. The entire complex of regulations concerning served meals, compulsory social dues and house meetings, bed-making, and room checks were cited as causes for the vacancies.

At the same time, similar dorms on the Riverside and UCLA campuses were experiencing vacany problems. Representatives of the university attributed this to spring fraternity-sorority rushing. Student newspapers, on the other hand, cited "lockout regulations, bad food, irksome rules, and noise" as the chief reasons.

In any case, plans for building more of the same type of dormitories were reconsidered. To combat the problem of vacancy rates, students were asked to sign one-year leases. As might be expected, rumblings of discontent continued.

In carrying out our study, we soon found that there were three closely related problems that seemed at the root of the

Sim Van der Ryn is an associate professor of architecture at the University of California and a practicing architect. He and **Murray Silverstein**, a graduate student, with four undergraduate assistants, undertook the student dormitory study on which this article is based.

trouble. Together, these three problems added up to what can best be described as the "institutional syndrome"—or "Institutionalism." They are:

1. *The lack of choice for residents* through standardization of design and operation. The dorm provides housing and other services for large numbers of people; but in the process, it reduces a student's options, and constrains what he does and how he does it. However, simply creating physical variety does not solve the problem. The student must participate as a "variety-making agent." No matter how pleasing the decor provided by the institution, the occupant who lives with it for many months wants to make his own changes.

2. *The use of programmed areas,* which were found to vary considerably from the program assumptions made by the architect and the administrator. Space needs are too often established parochially without considering the campus and student life as a single fabric of people, activities and buildings.

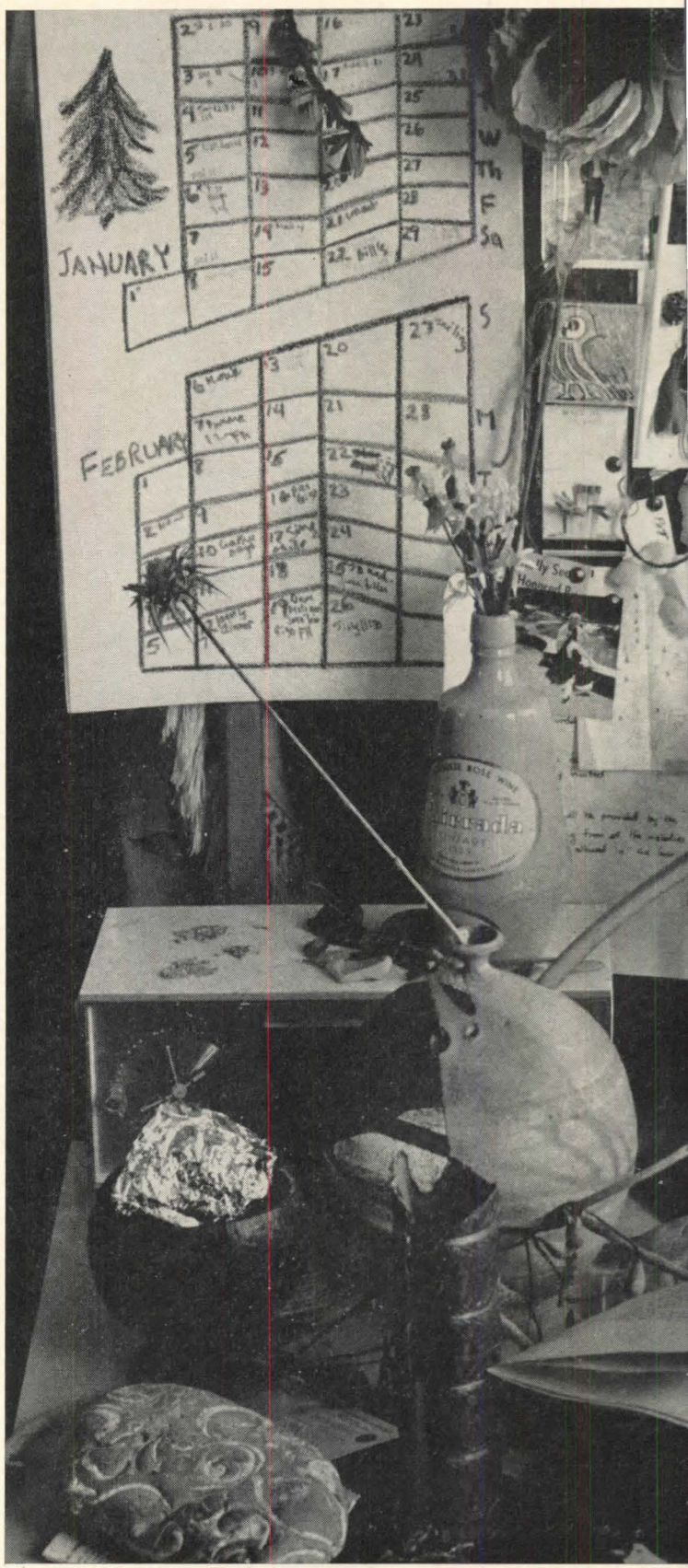
Incorrect design assumptions are often made with regard to the frequency and number of users involved in an activity; the uses to which the space is put; the size of the space required for a given activity; and the degree to which it fits its purpose. The main lounge in student dorms is often a good example of poor programming. It may be well furnished and decorated, but it appears mainly as a *setting* to impress visiting parents. Students commonly refer to lounges as "furniture showrooms." Though programmed as spaces to bring people together, lounges seldom meet this purpose spontaneously.

3. *A conflict of values* requiring change in basic policy. Since decisions about student housing tend to be made by the business office rather than by academic planners, there is a strong temptation to make student housing serve administrative rather than educational objectives. For example, we believe that the Berkeley dormitories were programmed on the assumption that there is an ideal student, with one schedule, one set of values, and one set of activities. These assumptions seldom consider the diversified interests of student life.

A study by Burton Clark and Martin Trow, for example, found four student subcultures on the American college campus. They refer to the four groups as "academic," "collegiate," "nonconformist," and "vocational" subcultures.

Each subculture tends to operate in different, overlapping orbits and on different life schedules. They have diverse values and perceptions. From our activity logs and interviews, we are led to believe that the residence hall program and design are usually attuned to the "collegiate" group at the expense of others. In fact, dormitory conditions tend to filter out students whose presence adds diversity and a sense of intellectual dialogue to the community. The "ideal" program is a misleading way to organize and structure the dormitory community.

We have organized the findings of our study into three parts, dealing with personal, social, and intellectual environments.





Students spend one-third of their waking hours in their rooms. This is more time than that spent anywhere else. Thus, the design of the individual student room and its immediate surroundings is the key planning element in college housing.

Conflict

Perhaps the greatest single deterrent to adequate privacy is sharing less than 200 sq. ft. (net) of space with someone else for 35 weeks. Clashes between incompatible roommates appear commonplace, and probably affect a student's approach to his work. Over half of the students we interviewed told us: "At times, I can't stand my roommate." Sleep, study, and privacy are needs which demand personal territory, while other activities may require degrees of common space.

Even when two roommates are compatible, there are irritations inherent in sharing private space. One girl said, "You don't have privacy in a dorm when you have a roommate"; another, "It's impossible to be by yourself in the dorms; you have to go to the campus if you want that."

The most obvious adaptation to double-occupancy is that one roommate simply leaves the room. Our data shows that both students seldom study together in the same room at the same time. Thus, the supposed economies of two-to-a-room occupancy necessitate places for study, solitude, and relaxation in other facilities on the campus.

Noise

Along with shared living space, noise is the great enemy of privacy. Loud noises carry along the corridor and from room to room. Rooms next to lounges, across from the elevator, the laundry, or the bathroom suffer from lack of sufficient wall insulation and sealing around doors. Rooms at the ends of the hall are reputed to be quieter. But even there slamming doors, loud conversations, radios, and hi-fi's are common problems at night. One student observed that "there is a constant low-volume noise. This can be very irritating at times."

Another source of irritation is the awareness that one might disturb others. "It would be nicer if the rooms were soundproof. . . . When I practice ballet or play my guitar, there is always someone complaining that they are trying to study."

Inflexibility of room equipment and rigid regulations pertaining to its use are cited continually.

New students moving into the dorm want to hang up prints and clippings, even paint the walls. But the university prohibits "tacking, taping, or otherwise marring the wall finish." It is the housing administrator's point of view that, while students come and go, the dorm remains and must be kept up at reasonable expense. So decorating is confined to a small 12 in. by 24 in. cork-board, placed behind the door. (Because students ignore the rule, there are unannounced inspections.) One girl who had moved from the dorm to an apartment put it quite clearly: "We've got space. . . . I can hang things up on the walls if I want to, and rearrange the furniture . . . everything!"

Students were irritated with built-in furnishings (even closets) and wanted to rearrange their personal space. There was a great variety of student-created furniture arrangements, although many fell into identical patterns. Roommates may rearrange their furniture as often as once every ten weeks.

Two out of three typical arrangements by women students had desks facing a wall and beds placed into a corner. Room arrangements by men students tended to be more asymmetrical and more varied. The fixed elements in the room (closet, window, mirror, wall lamps, and door) eliminated many possible arrangements.

We concluded that, in double-occupancy units, roommates try to create their own territory; they try to escape each other's fields of vision (see photo, page 94); they seek spatial isolation while sleeping.

Privacy paramount

The desire for "personal territory" is expressed in a number of ways: 94 per cent of the sample group surveyed by us arranged the furniture completely on one side of a hypothetical line that splits the room into halves. So the desire to create personal territory seems to be stronger than the desire to share the space with a roommate. We also found that students wanted to study without being observed by their roommates. In the majority of rooms, students rearranged their desks so as to exclude one another from view while working.

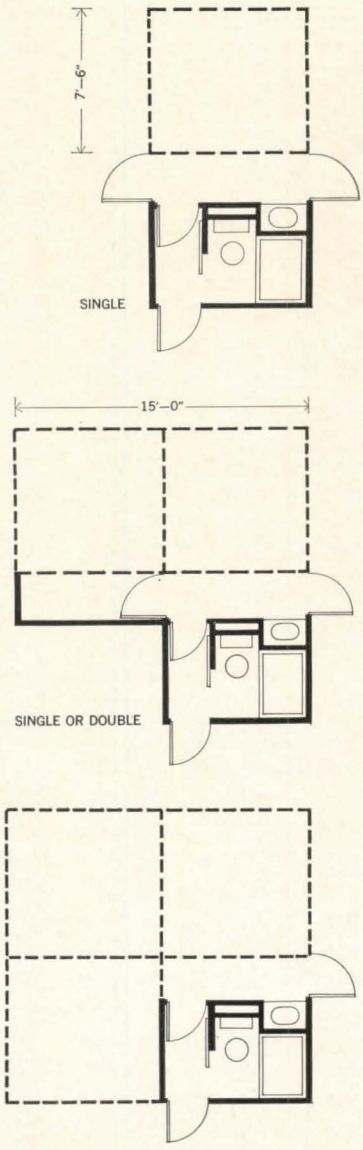
The old Las Casitas housing on the Santa Barbara campus of the University of California is reported to have been heavily favored by students over accommodations of better physical quality. The housing officer on the campus suggests that the reason for this popularity was that students could do what they wanted to their rooms. Similar results are reported of the rather cramped trailer units used at Santa Cruz for temporary housing. And the editor of the *Daily Californian,* in an editorial on the students' preferences, wrote that "people will put up with a lot when on their own as compared to being at home or in a dorm."

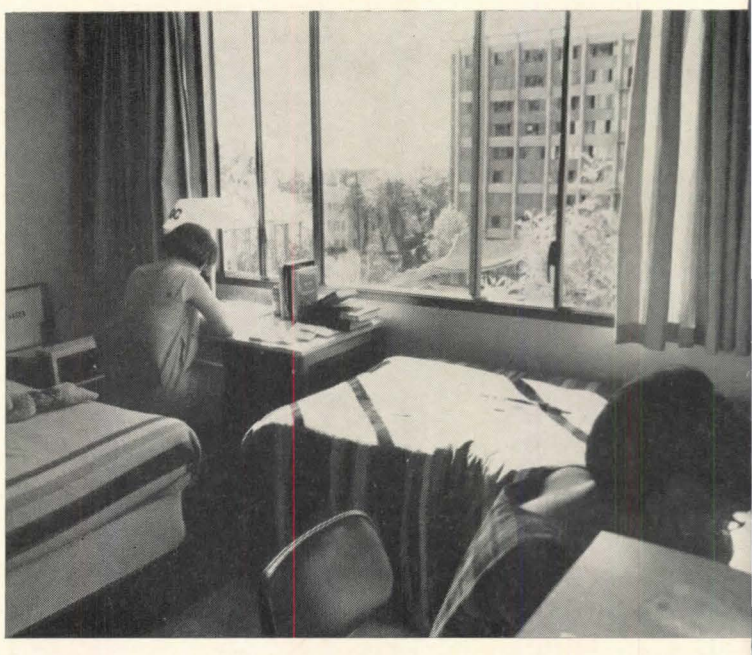
THE SOCIAL ENVIRONMENT

The most intelligent college housing proposals in the last few years have advocated "natural" social groupings as key determinants of the housing plan. The suggestion is that there are optimum group sizes for various activities, and that collections of small groups make up ever larger groups. By manipulating circulation routes, patterns of adjacency, and room clusters, designers have sought to provide an explicit hierarchy of social groupings or communities. These communities always begin with the student room and usually build up to large dining commons or a central quadrangle. There is some disagreement among designers and administrators over the ideal numbers for these groups and how each group should relate to the others. Housing administrators have been particularly concerned with establishing optimum group sizes. The obvious question — optimum group size for what purpose?—is seldom asked. At present, group sizes are generally determined by the logic of managerial efficiency.

We believe that the social groupings concept is misleading. Our research suggests that it contains several weaknesses. For example, a rigidly planned hierarchy of social groupings encourages a static, clique-ridden social structure. In predicting a social order, the planner makes it difficult for variations in that order to occur.

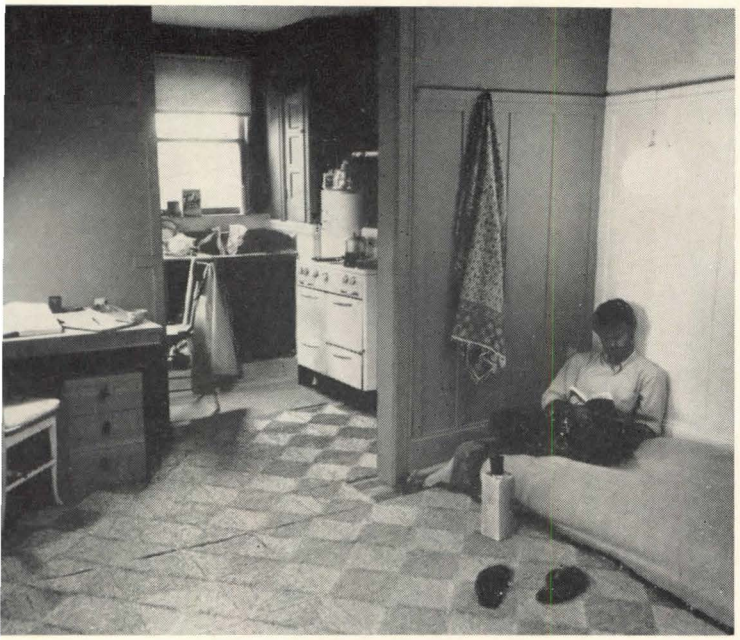
Each student belongs to many groups, each functioning differently, and changing in structure, numbers, and style. The formation of such groups may be facilitated by proximity and shared circulation and other spaces. But design should give students a choice of the groups to which they would like to belong. The activities that generate groups tend to overlap; usually they are not linked to







Plans above show modular planning proposal by author. Unit plumbing core measures 5 ft. square; individual student areas measure 7½ ft. square and may be combined into larger, multiple-occupancy rooms, or kept separate. Doors lead to common living areas. Photos show how students rearranged desks in dorm to achieve privacy while studying (top left); student apartment off campus (top right); and "social facility" in Berkeley dorm.





a single space. Space for people to get together must be integrated with reasons for people being there. Casual or routine activities are better social integrators than formal lounges which, according to our observations, people seldom use.

From observations and interviews at the Berkeley dorms, we learned that each floor becomes a cohesive social group that is difficult to break out of. Students on a floor tend to stick together even in the large commons and dining room. A majority of the students interviewed found this "sticking together" at times oppressive. One girl said, "I get along with the girls on my floor, but they all think I'm a snob because I don't do *everything* with them."

The main lounge and library do little to develop overlapping social groups among the residents. They are used most of the time by loners and occasional couples looking for privacy. Largeness and formality of furniture arrangements are the most commonly cited characteristics that discourage casual, small-group use. High visibility within, bright lighting, high ceilings, and visibility from the entrance hall make the lounge awkward as a dating parlor and impossible as a study space.

The large dining and recreation commons also fail to provide an effective and congenial place for coed social and intellectual meeting, since the students generally use the space in their small floor cliques; the physical form provides little leverage for social interaction (men and women are provided with separate entrances!).

In fact, the dining hall compromises many of the positive social functions associated with group dining. Intellectual or intimate conversations, for example, are best encouraged by quiet, secluded areas, where there is an atmosphere of "take as long as you want." Such conversations play a vital part in students' lives, but facilities serving great numbers of people are usually designed for easier maintenance and greater efficiency, rather than for intangibles such as these.

Dining habits

We defined five distinct social patterns in the dining hall. Each might be reflected in the design program:

Gorge and go. The student is in a hurry and needs a quick meal; he does not want to be detained by meeting friends, waiting in lines, or getting dressed up.

Casual dining—making friends. Students try to use meals and snacks to meet people and to exchange ideas and community information. Varied table shapes and certain types of food dispensing can help. Psychologist Robert Sommer's work indicates that long tables are conducive to meeting new people, while circular tables are best for groups already formed. Self-service counters give students a chance to start conversations with strangers.

Intimate conversation with friends. Students occasionally need facilities for quiet, leisurely meals and conversations with a girl friend or an old buddy.

Solitary meals while reading. The coffee bar–news rack combination is often patronized by students who want to read while eating alone. They look for a relatively quiet, unhurried atmosphere, and adequate reading light.

Snacking. Students would like to be able to get or prepare a bite to eat at any time of the day or night, without necessarily getting dressed up for the public. Innovations in vending machine service may change traditional snacking habits.

THE INTELLECTUAL ENVIRONMENT

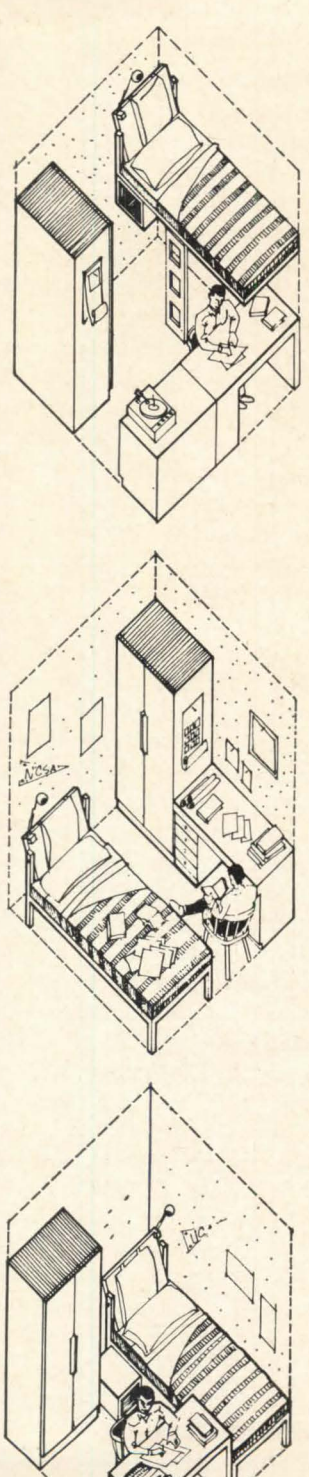
At Berkeley, as at many other schools, studying occupies more student time than any other single activity. And a sample of 400 students at four eastern colleges showed that students spent about six hours a day studying.

The typical room environment described above suggests some of the reasons why most dorms fail as a good place to study. The double-occupancy room, with its lack of privacy, its noise, its interruptions, and its conflicts in roommate schedules, is not conducive to study. Moreover, the room is inadequately equipped for good studying.

Some studying can be carried on in groups; but the main need is for a chance to work alone in a personal space. Analyzing study preferences of 700 students in six community colleges, the Stanford School Planning Lab noted that "the sharp difference between studying alone and studying with even two or three other students is probably meaningful."

Forty per cent of the Stanford sample found studying alone "extremely desirable," while only eight per cent felt the same about studying with two or three others.

When it comes to equipping a room for study, administrators and designers seem to have forgotten their own college days. Writing papers and reading from various source materials requires plenty of horizontal surface and storage. Our questionnaire found that almost half of the residents found their desk tops (24 by 40 in.) too small for their work. Sixty-eight per cent were forced to move books, radios, lamps, clocks, etc., off their desks when they wanted to study. The one desk drawer (12 by 15 by 8 in.) provided inadequate storage. One student said that his desk was "certainly too small to do any comprehensive assignments consisting of several pages and using two or three books." Surprisingly, we found the bed used extensively as a study place. Forty per cent of those questioned said they used the bed rather than the desk for reading and writing. Others found the floor best suited to their study purposes.



Isometric drawings of typical 7½-ft.-square student unit proposed by authors. Furniture pieces are identical in all three examples, but easily arranged in different ways.

This suggests that, just as hospital beds have developed along specialized lines, students' beds might be designed with study in mind, including an adjustable headrest, writing surface, storage, and lighting. The distaste we found for bunk beds may reflect the fact that bunks are not good study places.

Study habits

Our investigation revealed four types of study behavior, in addition to the intense individual variety:

1. *Casual study:* the student seeks relative isolation during study time, but stays in touch with some other social situation during frequent breaks.

2. *Waiting-for-something-to-happen study:* this usually occurs in a group setting where some social exchange is considered permissible; it is often associated with a lounge, library reading room, or even coffee shop.

3. *Small group study "semming":* characterized by a seminar-size group of three to seven students; they try to isolate themselves from others while swapping class information.

4. *Intense study out of the room:* cramming or library assignments requiring use of extensive references.

Of course, the student dorm cannot be expected to supply study areas for all the different kinds of study we have outlined. In any case, each student tends to develop his own inventory of favorite places: the library, a carrel in the stacks, a quiet corner of the coffee shop, a shady place on the grass.

Decisions about how student housing will accommodate these different kinds of study can best be made after a realistic appraisal of study locations available on the campus.

One measure is gross square feet per student *on* campus along with the characteristics of the spaces. The amount of gross space per student will vary according to discipline. So it is necessary to design for study on a campus-wide basis, with the dorm as the home base where individual and small group study conditions are available.

Along with problems of study facilities goes another difficulty in the present intellectual environment: the breakdown of informal faculty-student contacts in large multiversities. The notion that housing can play a part in the overlapping of academic and nonacademic lives has caused much comment, generated many articles, and produced few physical results. Yet students interviewed continue to claim that present dorms, if anything, widen the split between learning and living.

The idea of creating close communities of teachers and students by building environments where they can live and work together in small groups is most promising when initiated by the students themselves. The 1967 summer residential program at Berkeley, conceived by members of the University Students Cooperative Association, and to be held in its facilities, is one such example.

There will be continuing exploration of residential living-learning concepts. However, any such plans should take into account the problem of faculty loyalties, interests, and time at a large university. It is inevitable

ıat the professor's loyalties, par-
cularly in his developing years,
e predominantly with his dis-
ipline and his department; so
ıat it may be difficult to inter-
ɜt the faculty for very long in
ndergraduate teaching away
:om their home base. Where
student residence is viewed
ırgely as "student territory,"
cademic functions in the resi-
ence hall are not likely to be
ıken seriously by the faculty
ıembers.

For his part, the modern stu-
ent is far more mobile than the
esident student of the tradition-
l English residential college.
'he automobile has expanded
ıe student's orbit and his con-
eption of the campus commu-
ity. The design problem is to
reate a network of scattered in-
ormal settings where faculty
nd students can meet on neu-
ral ground.

Housing needs

Our evaluation at Berkeley
nd additional surveys of stu-
ent housing conditions across
he country have led us to some
onclusions about student hous-
ıg needs and how they may
e met through design. Follow-
ıg are a definition of needs and
erformance specifications for:
. room and furnishings and
ersonal space arrangement;
. the room itself; and 3.
ommon living space activities
nd facilities.

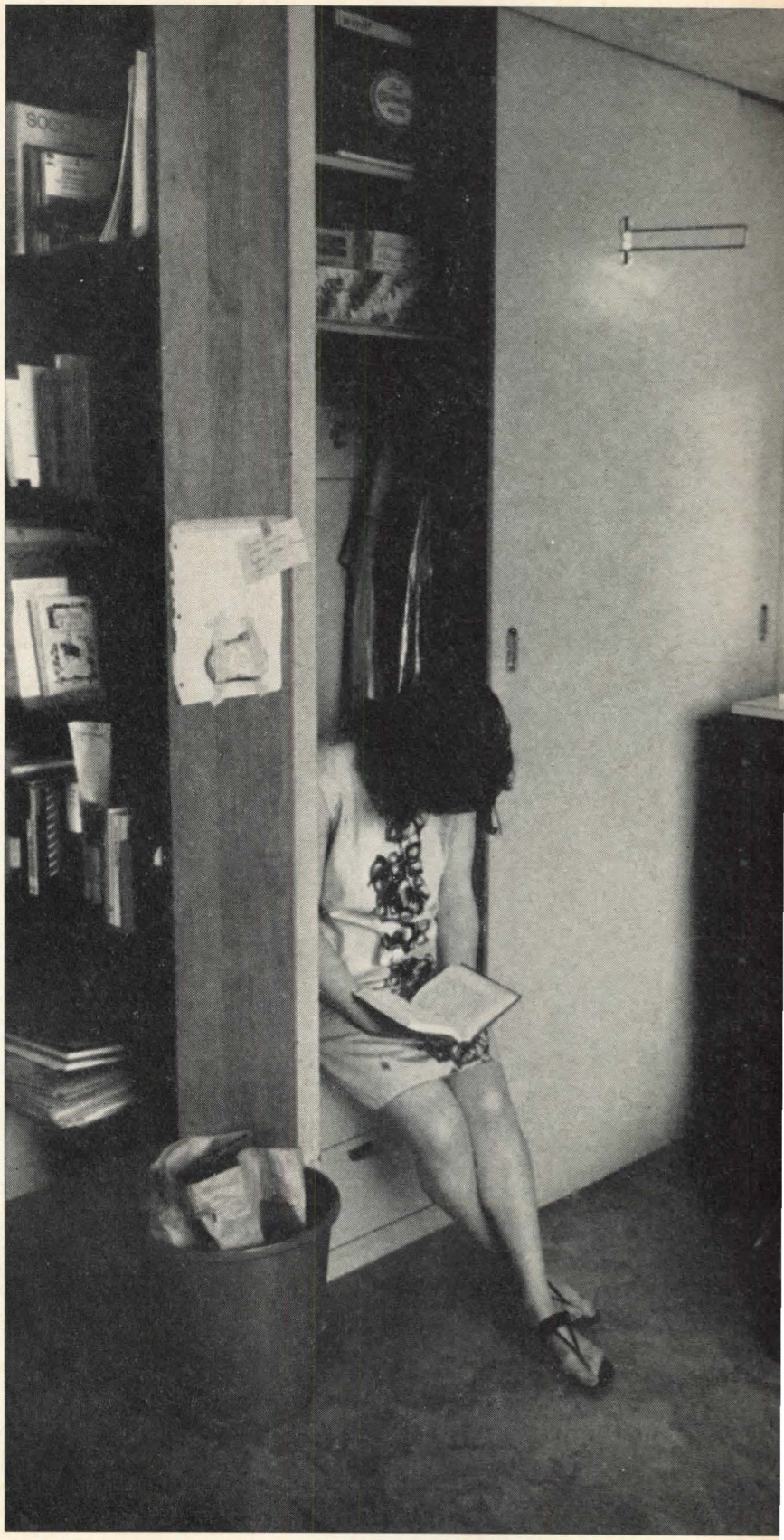
To provide the kind of hous-
ıg that students want is no
ıore expensive than what is
ow, generally, being built. The
ross space per student to pro-
ide the single room illustrated,
ıcluding common living space
nd circulation, is less than 250
q. ft.

In addition to innovations in
ıe design and construction of
tudent housing, new financing
ıechanisms are required. Much
f the student housing built in
ıe last decade was financed through long-term, low-interest Federal loans to institutions. We propose that a loan program like that for senior citizens (another group with specialized needs) be made available to non-profit student housing cooperatives. These cooperatives know the needs of students better than the institutions that serve them, and generally operate lower cost housing to the greater satisfaction of students. For example, Berkeley's University Student Cooperative Association provides room and board for more than 800 students at a cost one-third less than that of the dorms. The greatest impetus to better student housing would be "easy money" for legitimate student associations to build themselves.

There are a number of field methods which can be used to study buildings and how people use them. These methods have generally been applied to study isolated aspects of environments. Our aim was to make an integrated analysis of a dorm environment. Since there were few precedents, the investigation was frankly experimental.

The techniques used to analyze the high-rise dorms in Berkeley included a review of the buildings' history: their program, design, and the policies behind them; observation in the building; user questionnaires; interviews, and "diaries" kept by the residents themselves.

The costs of environmental analysis should relate to improving the effectiveness of the institutional program. The consequences of environments that don't work well for people are often difficult to measure directly in relation to the institutional balance sheet. Often it is the user and his community, rather than the institution, who pay the psychic and social consequences of ill-fitting environments.

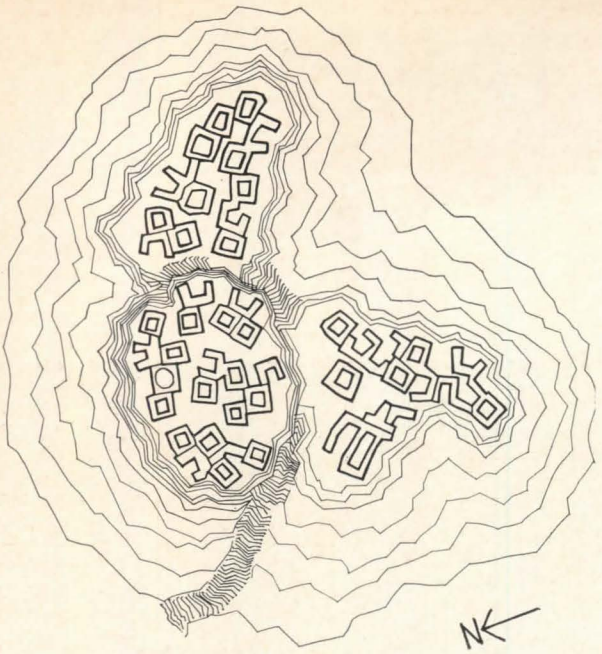


PHOTOGRAPHS: C. Ray Moore

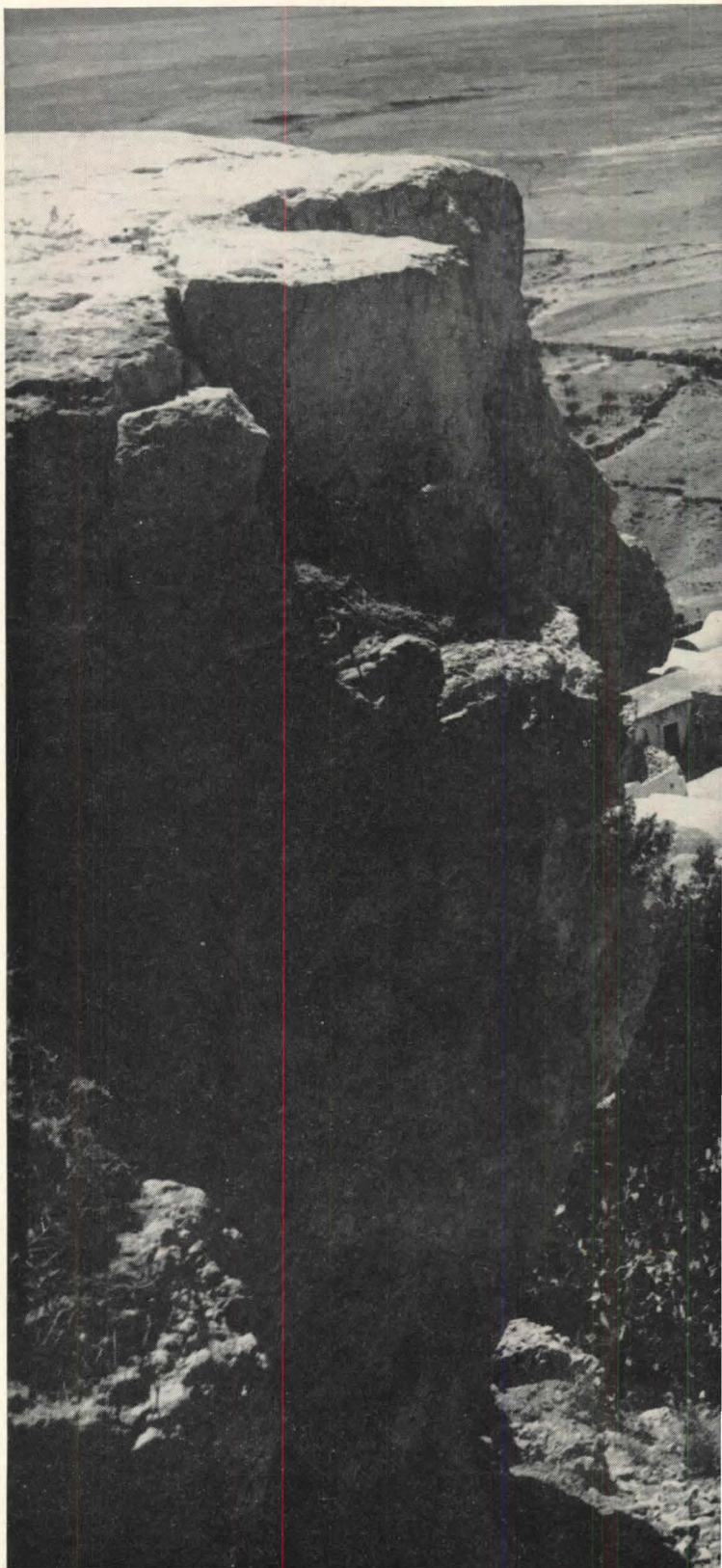


TAKROUNA





About 50 miles south of Tunis, the plains of Tunisia are broken abruptly by an outcropping that is really a cluster of three plateaus (plan above). On them, centuries ago, the Berbers built the village of Takrouna as a stronghold against Arab invaders; its effectiveness is demonstrated by the Berber population there today. Now that the need for defense has passed, the villagers have put up a few buildings at the foot of the cliffs, near their fields and olive groves. A camel trail winds up from the plain, pausing at the first level of the village (center in photo), then spiraling past a second level to the topmost rock.

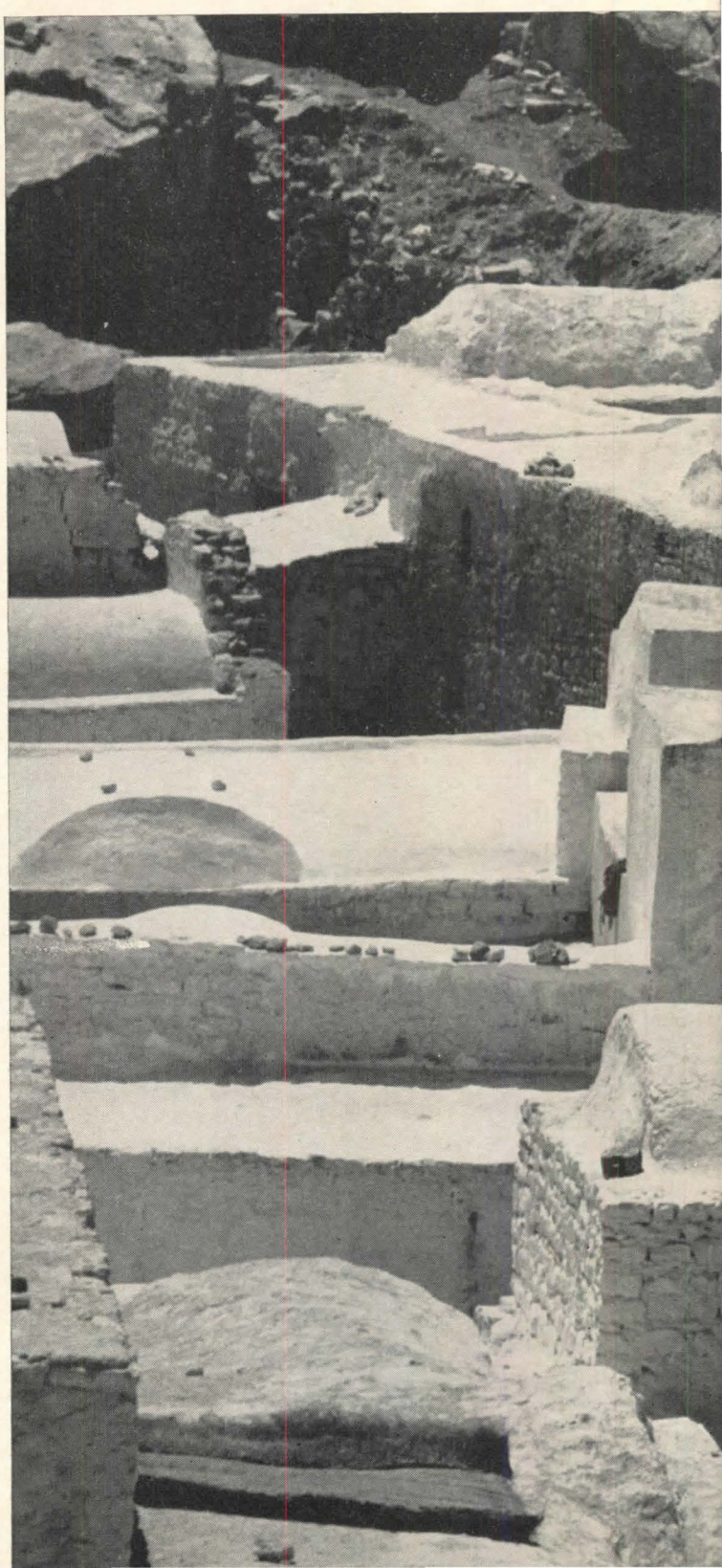


MYRON HENRY GOLDFINGER, *an architect and assistant professor of architecture at Pratt Institute, photographed Takrouna and gathered the information presented here.* *His research was carried out during a trip through the Mediterranean area, made possible by a Travel Grant from the Ford Foundation and an Arnold Brunner Award from the Architectural League of New York.*

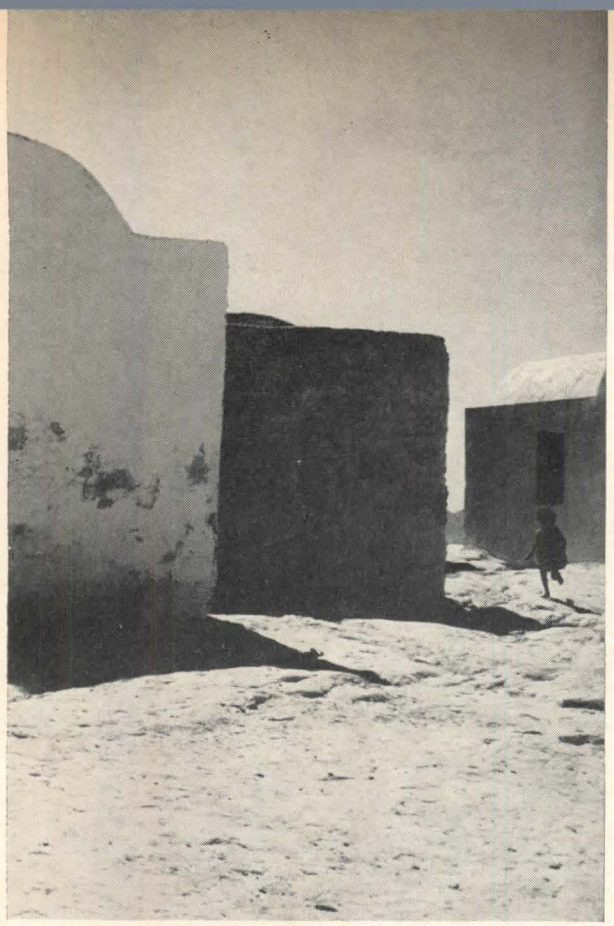




The village has been built up almost entirely by the repetition of a single distinct architectural unit, a barrel-vaulted rectangular block, which ties the three separate levels together into a consistent whole. The use of stone for both walls and vaulting is a response to the local scarcity of wood and the need for maximum protection against both heat and cold; a thick coat of white stucco reflects sunlight and reduces wind infiltration. The short transverse vault at the center of each block adds structural rigidity and gives emphasis to the central doorways.







Takrouna's rectangular building blocks have been laid out to form closed courtyards (see p. 101), offering protection against the fierce winds sweeping in across the plain. Their basically square plan has been distorted in many cases to fit constricted sites. Twists in the narrow stone streets between these enclosures provide some shelter from the wind. Everywhere one moves there are views up toward beetling cliffs, down on other parts of the village, or out across the plain (right). From some points the Mediterranean is visible, ten miles to the east.



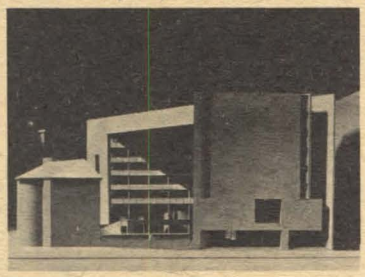



CAESARS
PALACE

FORUM CONT'D

competition in 1964, was scrapped after the institute had second thoughts about its bulk in relation to the Octagon. To overcome the problem, the institute decided to purchase more land adjacent to its site and launched a campaign to collect $500,000 in contributions from the membership. Mitchell/Giurgola were asked to produce a new design for the expanded site.

"We struggled through six schemes during a year, and had unanimous feeling that this was the best plan," said Willis N.



Mills, chairman of the headquarters committee, after the Fine Arts Commission had delivered its onslaught. "This is really a shocker. I just don't know what we're going to do now."

There isn't much the AIA can do, since the commission's decisions are virtually impossible to overrule. The District Commissioner alone has authority to do so, but that has never happened. Thus the institute has only two real alternatives: abandon the project or work with the commission to arrive at an acceptable solution. The latter course almost certainly would mean starting from scratch with a totally new design concept.

FOOTNOTE

Decline and Fall—The petrified nudist colony shown at left is your first glimpse of a new "Palace of Pleasure" created (we're groping for the precise term) at Las Vegas. The joint is called Caesars Palace—no apostrophe—and the prospectus, printed on papyrus that appears to have suffered third-degree burns administered by a no-goodnik called Nero, reveals that the management has "dedicated this noble edifice to be the world's most magnificent playground . . . a jewel . . . the summit of breathtaking enchantment." The summit of breathtaking enchantment was designed by Melvin Grossman, and we feel that the American Institute of Architects should hold its next convention here. The keynote speaker should, of course, be John Kenneth Galbraith. PHOTO: Las Vegas News Bureau.

EXHIBITIONS

GOLDRUSH EXPO

Three thousand miles from worldly Montreal, Alaska is celebrating, with an Expo of its own (familiarly called A 67), the hundred years since its purchase from the Russians. The 40-acre, $5-million complex (above, right), near the center of Fairbanks, seems a simpler and quieter affair, devoted to recalling Alaskan history (or inventing it where such is lacking) with displays of native lore and handicrafts and other sentimental trophies. Gold Rush Town commemorates an era of lawlessness with the appropriate nostalgia: original houses, transplanted



from historic sites, plus the inevitable (recreated) Palace Saloon. In Mining Valley, enterprising visitors can pan for gold in a workable and plenished gold dredge and keep what they find.

The Achievements of the Mind have not been neglected either: a display of his works honors the local poet, Robert W. Service, known nationwide for such brawling ballads as "The Shooting of Dan McGrew" and "The Cremation of Sam McGee." There is also a wildlife area, small industrial exhibits, a fun fair, and a Park of Religion.

The only bit of one-upmanship with Expo 67 might be inferred from the fact that of the three main exhibition buildings *two* are geodesic domes. One of them, the U.S. Pavilion, which belongs to the U.S.I.A. has graced fair grounds and trade shows of many foreign nations. Synergetics built this one under arrangement with Buckminster Fuller. The other, larger one (122 ft. in diameter), is Seward Hall. It houses industrial and civic exhibits and was built by Temcor of Torrence, Calif.

The exposition will close on September 30, at which time the site, with the exception of the U.S. Pavilion, will become a permanent installation, called Fairbanks Pioneer Park.

LANDMARKS

TOO GOOD TO LAST

The distinctive silhouette of Ernest Flagg's 1906 Singer Tower (right) will soon be missing from the downtown Manhattan skyline if plans for a new U.S. Steel building (not yet made public) are approved by the city. Like many New York office buildings, the 47-story Singer was once the world's tallest (for a few months after its completion).

But the Singer Tower (April '57 issue) is distinguished for more than mere height. It was a landmark in high-rise steel construction, with a ratio of height to width of 7/1, possibly still a record for an office building. The four facades of the tower have vast areas of steel and glass between solid masonry corners that conceal dense webs of diagonal steel bracing.

Unfortunately, the tower stands on very valuable real estate, right between the Chase Manhattan Building and the site of the World Trade Center. Despite its high rank on the Municipal Art Society's list of New York buildings to be preserved, it was not even proposed for designation by the Landmarks Preservation Commission. Its demolition was planned even before the commission began to operate; it was a foregone conclusion that the city could not afford the compensation it would have had to offer the owners under the landmarks law. U. S. Steel has already met with the City Planning Commission to explore the possibility of substituting a



plaza on the adjacent block for the open space required under the zoning law. If the city could request instead that the tower be saved, it would be a greater civic contribution than one more plaza in an area that already has several (and more on the way).

If the tower can't be saved, at least a way could be found to preserve the lobby (right), a major architectural asset in itself. With its gold-veined marble columns trimmed with bronze supporting skylight-crowned plaster domes, it could make an excellent two-story arcade, lined with the kinds of vital shops and restaurants that are displaced every time a major new office building (and plaza) is constructed.



COMPETITIONS

RESULTS FROM BIRMINGHAM

A complex of four tightly integrated buildings surrounding an outdoor pool and plaza (below), designed by George W. Qualls of Geddes Brecher Qualls Cunningham, Philadelphia, has been declared the winner of a national architectural competition for the Birmingham-Jefferson Civic Center in Birmingham, Ala.

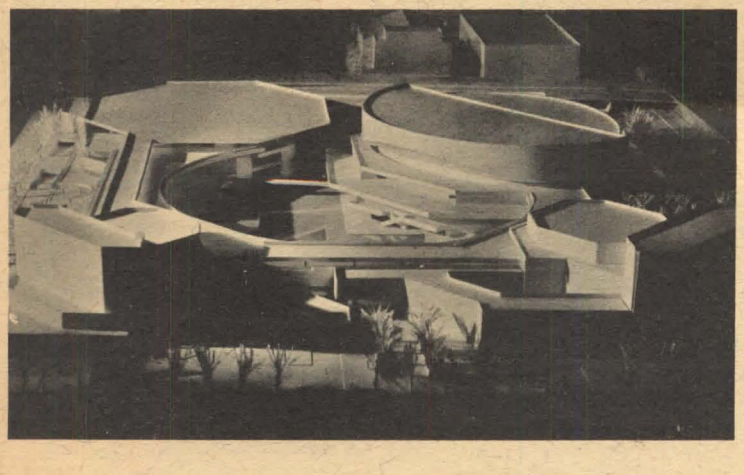
The $25-million project will contain a 13,000-seat sports coliseum, a 100,000-sq.-ft. exhibition hall, a 3,000-seat concert hall, and a 1,300-seat theater. The winning design, selected over 276 first-stage entries and eight finalists, contains separate parking garages under each of the four structures and links the buildings by a series of walkways and terraces.

The design encourages use of the central plaza by the general public even when no events are taking place within the buildings. An outdoor amphitheater (not visible in photo) rings three sides of the central plaza, and a platform extending over the pool on the opposite side is designed to serve as a stage for outdoor performances.

"With further development," said the report of the competition jury, "the Civic Center as projected in the winning design can evolve into another great public piazza to take its place among the well-known outdoor civic spaces of the world such as are to be found in Venice, Stockholm, and Rome."

Second and third prizes went respectively to Ralph Rapson of Rapson Architects Inc., Minneapolis, and to Marvin Fitch of Fridstein & Fitch, Chicago.

Judges for the competition were Architects Max Abramovitz, Gyo Obata, and John Carl Warnecke; Harold Burris-Meyer, director of the University Theater, Florida Atlantic University; and John Fernald, director of the Meadow Brook Theater, Oakland University, Michigan. Architect William Briggs was professional adviser.



SEQUELS

S.O.S.

An 11th-hour solution to save Wright's 1922 Imperial Hotel in Tokyo (March '67 issue) has been put forth by one David L. Leavitt in a letter to the *Japan Times*. Tokyo zoning, the letter says, permits a "Floor Area Ratio" that applies to the entire site of any given project. If the Japanese Government were to declare the Imperial Hotel nonexistant (i. e., vacant land), its owners could then build a new high-rise hotel on the parking lot behind Wright's building. And after the new tower is completed, Wright's old hotel could be converted into an ultra-modern, multilevel shopping center. Wright's lobby, dining rooms, and roof gardens would be kept intact, and new facilities could be added.

The demolition of Wright's Imperial Hotel is imminent. Those endorsing Mr. Leavitt's proposal should write an airmail letter to the Architectural Institute of Japan, Ginza-Nishi 3-1, Chuoko, Tokyo, Japan, and stick a 25¢ stamp on the envelope.

STRATEGY

ANCHORS AWAY

New York City and the GSA have reached an agreement on the price of the former Brooklyn Navy Yard. Subject to Congressional approval, the city hopes to buy the 292-acre site for $24 million and turn it into an industrial park.

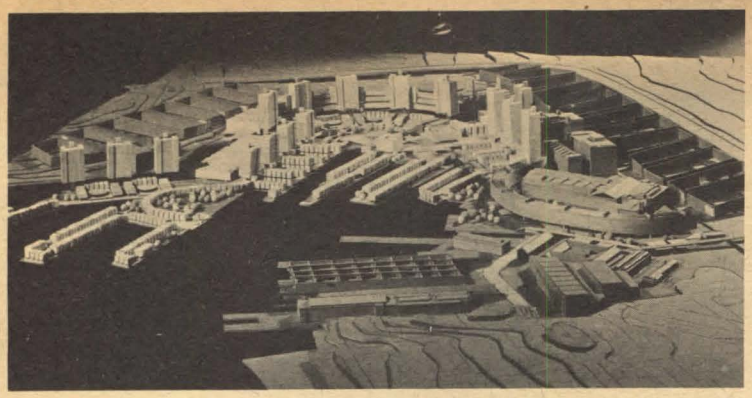
This would not command much interest outside of Brooklyn, except for the procedures by which the deal is being made.

Preliminaries are being arranged by the Public Development Corp., a quasi-public body created last summer by Mayor Lindsay to accelerate the growth of industry in New York. The agency is being financed by $250,000 in city funds and an equal amount lent to it by eight city banks.

Enabling legislation requested by Lindsay (passed by the state legislature, and now awaiting Rockefeller's signature) permits the city to lease land to the Public Development Corp. for 99 years *without public notice or public bidding*. The corporation then re-leases the city-owned land to private developers. In the case of the Navy Yard, the developers are a group of business, labor, and civic leaders from Brooklyn who have incorporated themselves into CLICK (Commerce, Labor, Industry Corp. of Kings County) for the purpose of developing the Yard as an industrial park.

The decision to develop the Yard for industry was apparently made early in the game. The Public Development Corp. says that the Defense Department itself recommended it, and that in any case the presence of six empty drydocks, expensive to fill, indicates industrial use as the only appropriate one. CLICK says that since 10,000 to 15,000 jobs were lost with the closing of the Navy Yard, the primary need for the area is employment, and any other types of development will have to wait. (Some space will be taken for job training programs, but any health or recreational uses that may ultimately find their way into the area will be minimal, included apparently for the purpose of Federal write-off.)

Given the purpose of these two groups—to aid the growth of industry—it is not surprising that an industrial park should be



their vision. But at a time when the single-use enclave is wearing out as a planning concept, it seems questionable to endow new bodies with the broad powers that will create still more single-use districts. (See photo, above, for a redevelopment study by Pratt Institute's graduate students in architecture: industry inland; a high-rise residential ribbon along the water's edge; row houses built over the water on jetties; educational, recreational, and shopping facilities also included in the redevelopment.)

PROGRESS

LANDMARKS' APPROACH

St. Louis now has a design for a block-wide mall to be cut through the downtown area linking its two major downtown landmarks — Saarinen's well-known riverfront arch and Carl Milles' famous fountain sculpture in front of Union Station. Now it must find a way to finance it. Winner of the $15,000 first prize in a design competition sponsored by the city and Downtown St. Louis Inc. was a scheme by Sasaki, Dawson & DeMay, which was one of the simplest of the 57 entries.

Unlike most of the runners-up, which proposed elevated plazas bridging streets, the Sasaki team put its mall at the existing grade level, accepting the interruption of cross streets. But the sight and sound of the two flanking streets (Chestnut and Market) would be screened out by low banks planted with triple rows of shade trees. The shallow depression of the greensward between the banks reflects in reverse the curve of Saarinen's arch.

The low elevation of the mall would allow full view of the major buildings that would interrupt it—the old Court House (in rendering below) and the high-rise Civil Courts Building. The designers propose a major air-rights building at the west of the station plaza to give the mall a visual termination at that end.

The rigid, linear character of the basic design is meant to preserve its identity through the many interruptions and modifications along its 17-block length. It will also compensate for the ragged edge of existing buildings along either side. The designers propose definite set-back and cornice limitations for new construction along the mall, which is likely to occur, especially on the eastern six blocks, where they propose a two-level under-mall garage linked to the Mark Twain Expressway.

BLAST-OFF

The AIA's East Bay Chapter in California thinks it's time to put architects into orbit. In an announcement which noted that "architectural skill will be needed more than ever in the planning and design of life-supporting environments in space," the chapter revealed that it has set up the nation's first Space Architecture Committee to help hurry the process along.

The new committee, which will be nationwide in its scope, intends to act as a gathering center for information about aerospace architecture, to initiate research and development, and set up educational goals. Its efforts will be directed toward helping the "space architect" deal with the "whole new set of design criteria" that living in free space will present—things like zero gravity, extremes in temperature and pressure, and human confinement over a long period of time.

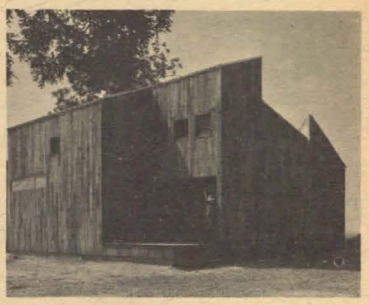
James B. Aitken was appropriately picked to chair the committee. His firm, Aitken & Collin, already contains an aerospace division.



GIFTS

A MODERN FABLE

Once upon a time there lived a very poor farmer. He was so poor that he didn't have enough to eat, nor had he any clothes, nor a proper house for shelter. When the brownies heard this they decided to surprise him. One night when everyone was asleep, they chopped down trees from the forest, and willy-nilly, with saw and hammer, built a house of two stories, sheathed it in rough-cut oak, and put in large, glass fiber skylights. The doors and window frames were painted orange, and the interior walls were painted blue. When the farmer awoke the next morning he was terribly happy. He thanked the brownies with tears in his eyes and shook hands with the brownie chairman whose name was Chuck Moore. And C.M. said that it was their pleasure, that the idea had come from the 30 littler brownies who were really first year architecture students at Yale (below) and were doing this as their term project. He also said that the design had been chosen out of a student competition. Well, it wasn't really a house for a poor farmer that was built, but a center (below) for an underprivileged rural community in New Zion, Ky. The rest is true.



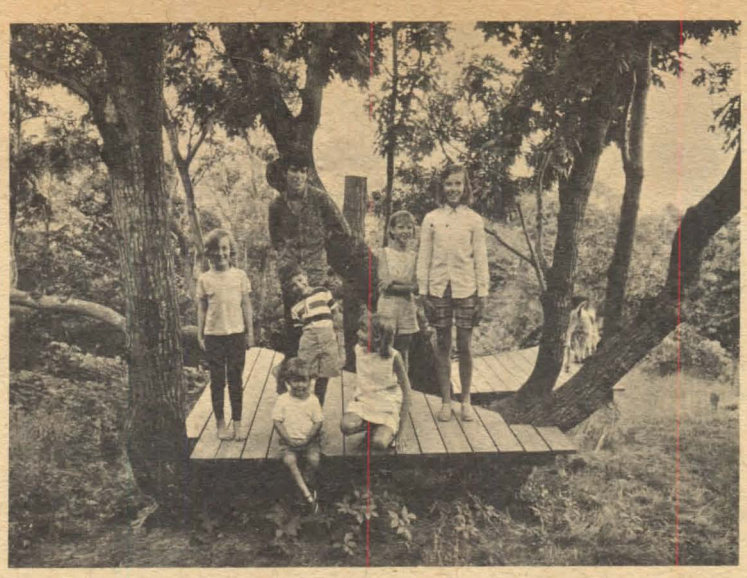


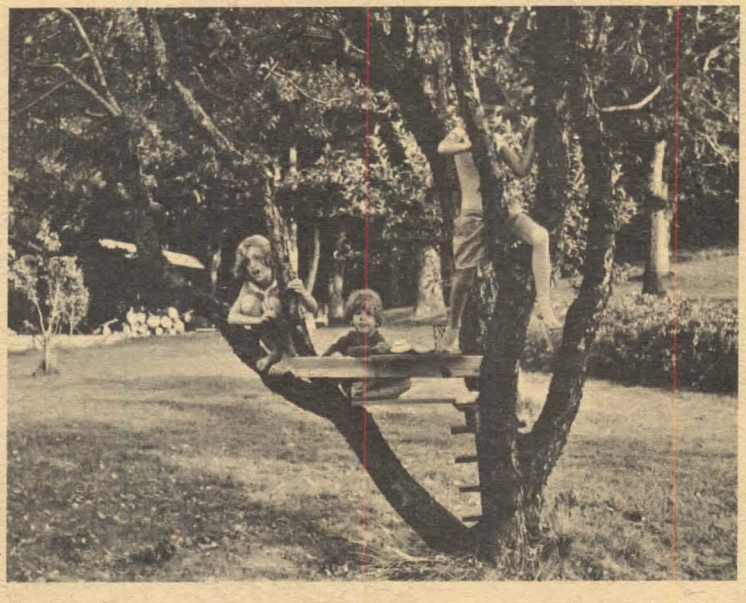
PEOPLE

► The question of who will design and supervise the six-school building program for the city of Hartford, Conn., which created a ruckus a few months ago (May '67 issue), has been settled. The assignment has been awarded to the firm of Caudill-Rowlett-Scott of Houston, Tex., whose work in this field has been widely praised in the past. Apparently those who had been trying to muscle in on the project did not succeed.

► Jerzy W. Soltan, the Nelson Robinson Jr. professor of architecture and urban design at Harvard, has been appointed new chairman of the department of architecture at the Harvard Graduate School of Design. Chairman Benjamin Thompson is on leave of absence for the academic year 1967-68.

Walter McQuade





SUMMER SCHOOL II

Last month, in this column of type, a suggestion was offered to architectural professors that they consider running a short design problem for their sophomores, to be performed outdoors during summer term, or even in the good early fall weather. The subject: the design of an outdoor fireplace for cooking, the students to construct mockups, and the final judging to be performed with the fireplaces in use. Offered in evidence was one example of an outdoor cookery out on Long Island,



made of a stack of old concrete blocks, perhaps under the early design influence of the great Louis I. Kahn. But the range of materials could of course be much wider than represented by this photograph. One architect of my acquaintance, for example, broils a superior sirloin simply in an old galvanized stove pipe balanced rakishly on some coals.

At any rate, such a design problem, even if not taken very seriously, could provide architectural students some nontheoretical experience in monumentalism, to say nothing of cooking. Also, it is possible that this design problem would have a certain social value. It is a good idea regularly to identify any architectural school within its academic community as being a little nonconformist, the students and professors as differing from English Lit or Engineering types—high-spirited, and, in a practical sense, very good livers. In short, early clientmanship; a kind of off-season Beaux Arts ball.

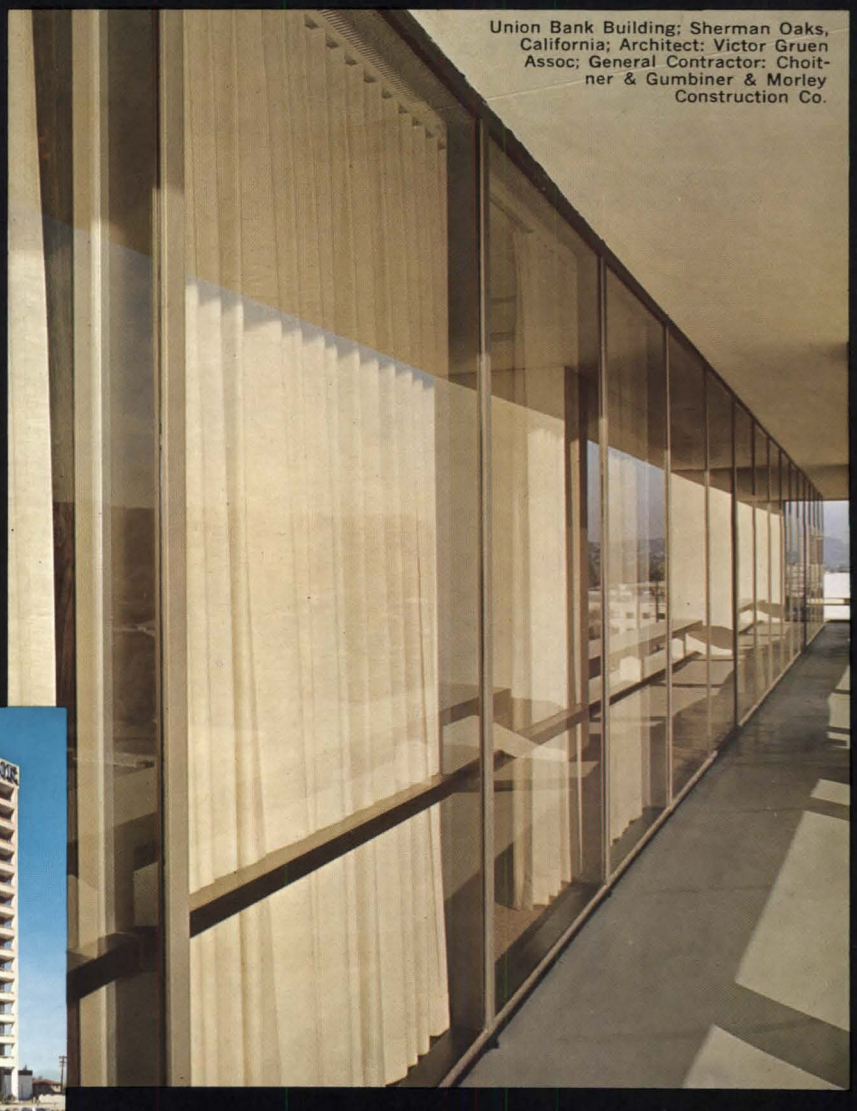
To add to the action, if your outdoor design arena has the right kind of trees, you might consider involving also some of the upperclassmen. Their design problem could be the design and construction of tree houses, another form of summer architecture indulged in out our way whenever there are a few extra planks on hand. In evidence I offer a pair of ours, peopled with scale figures of various sizes. (You may object that these are very low-slung tree houses, and you have a point. There is a reason they are low: if there is any noise my wife dislikes, it is the twig-like sound of snapping collarbones of juveniles falling out of the high kind of tree houses.)

It can be argued that this kind of simplicity might not appeal to jaded second- or third-year architectural students, who might be more interested in lordly design problems calling for international courts of justice, etc. But I wonder. It is hard to avoid learning while actually building something, even something very easy.

And if the assignment did have to be made more difficult, the program could call for a sheltering roof overhead, perhaps slung a la Frei Otto, fabricated of surplus parachutes. Be under no illusion that these are as simple as they look to design; maybe you could get the graduate students in on that problem. But the basic designs will remain the fireplaces and the tree platforms. After all, the design jury will need somewhere to put down their beer glasses during the judging.

PHOTOGRAPHS: Page 43, the New York Times. *Page 44,* Le Soir, *Brussels (left); Cartoon Grandville (right). Page 45. Cheri Jenkins (top right); David Hiser (center). Page 46. Skyviews, N.Y. Page 107, John Brannon Albright (top); Cervin Robinson (bottom). Page 108, The Bettmann Archive, N.Y. (top); Jimmy Wilson Studios (bottom). Page 109, Hutchins Photography Inc. (bottom); Albert Lau (center and center right).*

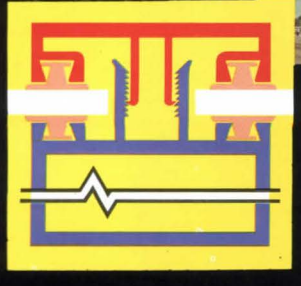
AMARLITE
RATCHET
CURTAIN WALL SYSTEM



Union Bank Building; Sherman Oaks, California; Architect: Victor Gruen Assoc; General Contractor: Choitner & Gumbiner & Morley Construction Co.

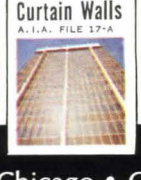
Ideal for store fronts ...low and high-rise slab-to-slab construction.

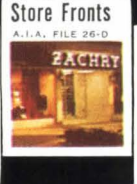


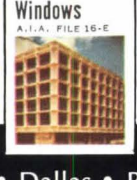


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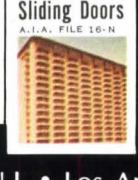












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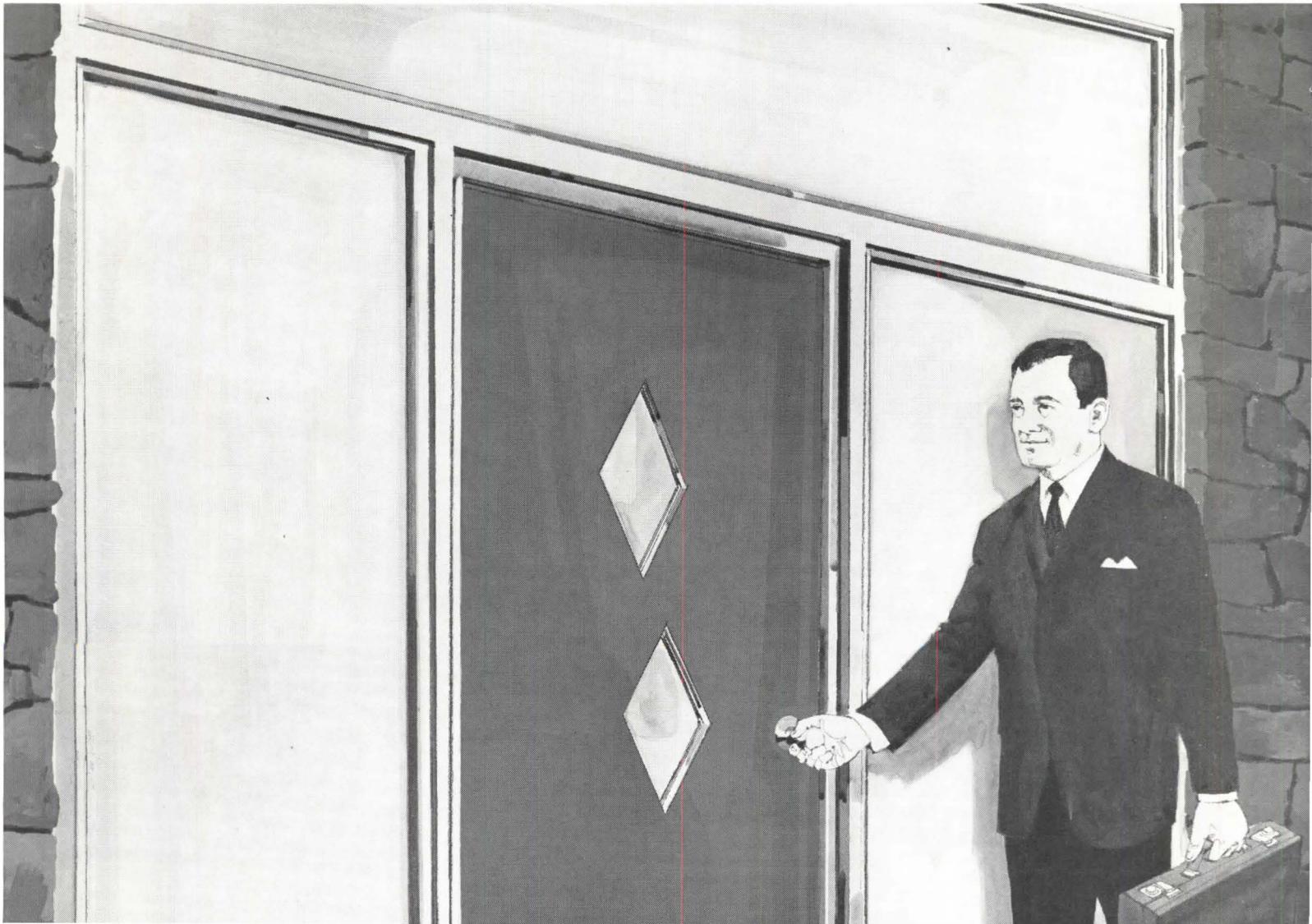
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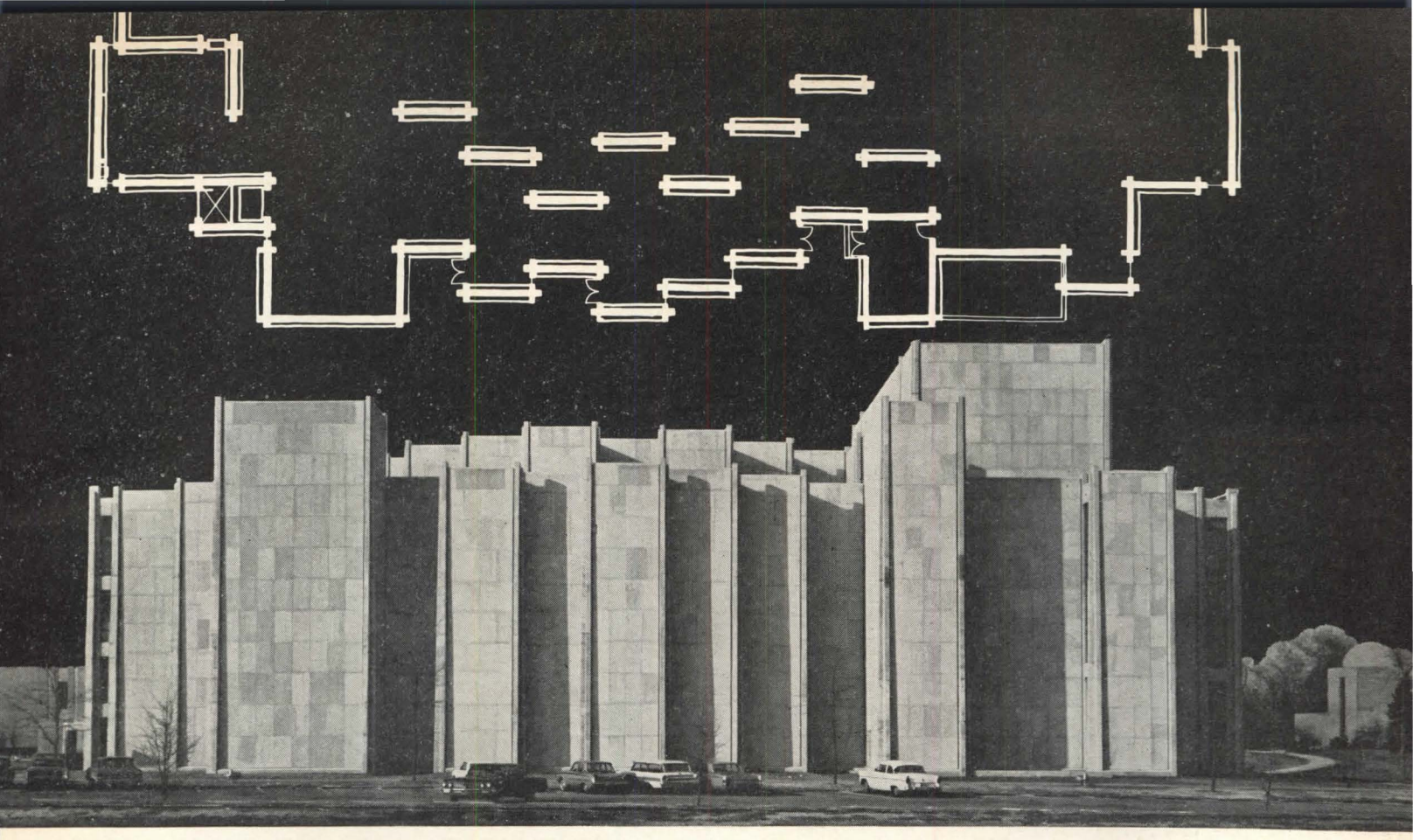
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PREVIEW

NEW LIFE FOR AN OLD SCHOOL

First prize in a design competition for the conversion of an existing school in New York City has been awarded to Frederick G. Frost Jr. & Associates.

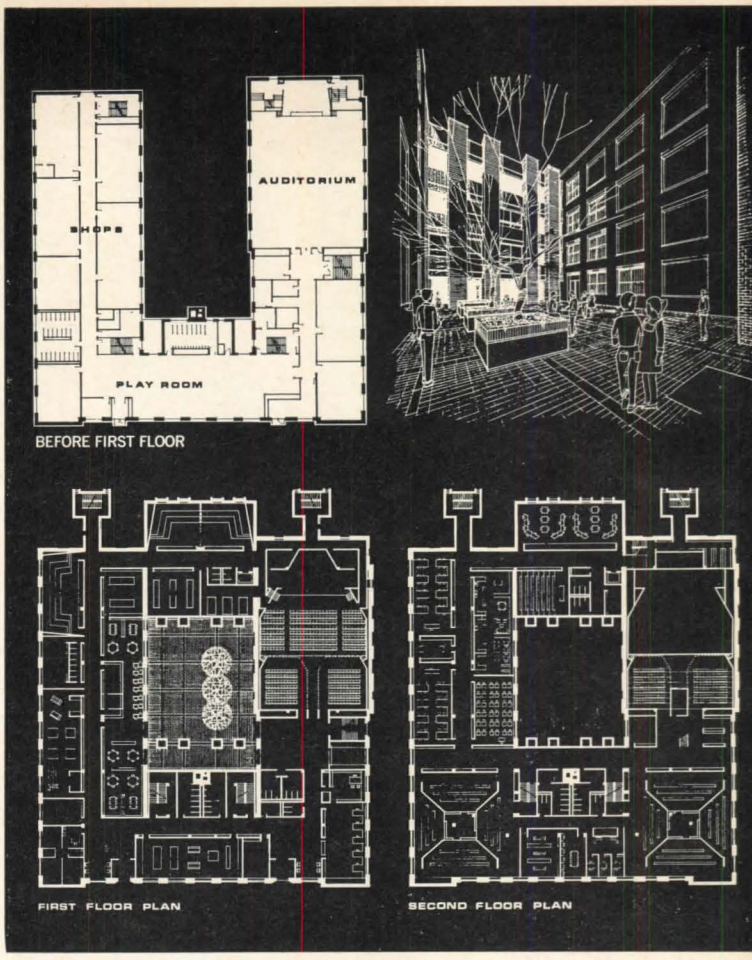
The AIA-approved competition, which drew 67 entries, was sponsored by the NYC Board of Education in cooperation with the *Research* Council of the Great Cities Program for School Improvement. The Research Council, with 17 member cities, is a "not-for-profit educational organization" studying the problems of public schools in the large cities. They have an EFL grant to study the modernization of outmoded school plants, and the current competition is one part of their "new life for old schools" program.

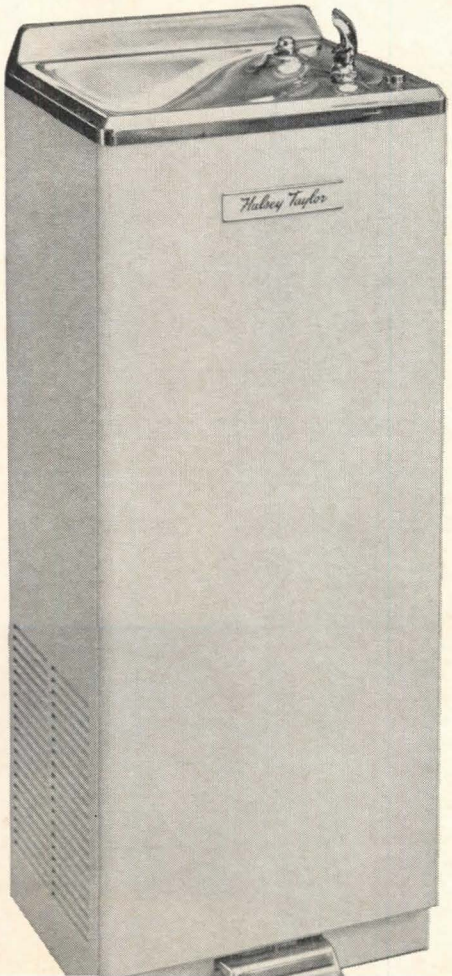
The competition stems from a decision by the NYC Board of Education in 1965 to create a new educational program for the "intermediate years," emphasizing individual rates of progress, individual study as well as group learning, and cooperative teaching.

The architectural program called for an enlarged library, science project areas, labs in all science rooms, classrooms convertible to seminar size, and centers for project work and independent study —all to facilitate individualized learning. Updating was required for many courses—language, industrial arts, health education, etc. Instructional areas were to be grouped into three sections, each with the intimacy of a smaller school but with access to the common facilities of the large school.

The winning entry squares off the U-shaped junior high school of the 1930s into a courtyard scheme. Within the $2 million budget, the architects have added new space at the rear, relocated stair towers beyond the building at the rear, and brought eight ducts up through the courtyard.

Said the jury about the winning design: "Thoughtful, sensitive, and professional; simple in its single addition; a sensible solution within the envelope of a difficult building; correct but dull." They suggest that the exterior be restudied before the city proceeds with the job.





5 Accessory Features improve

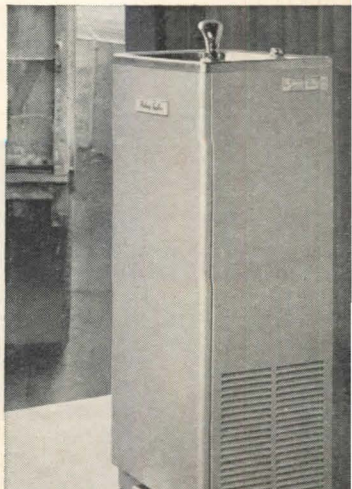
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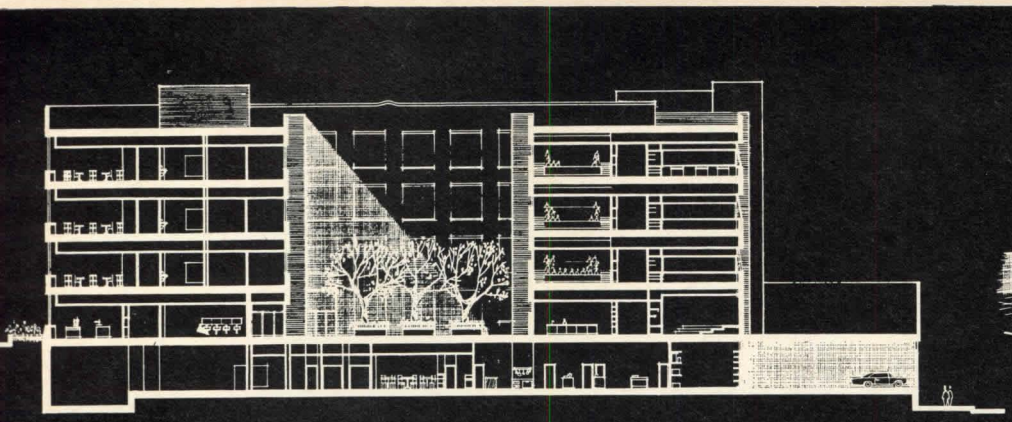
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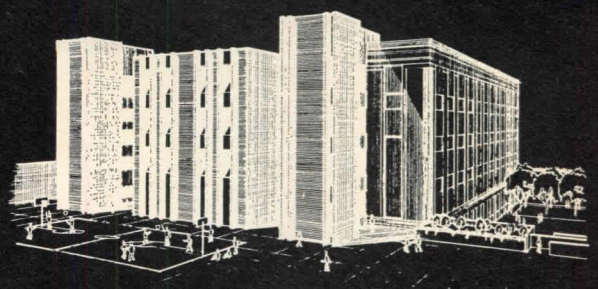
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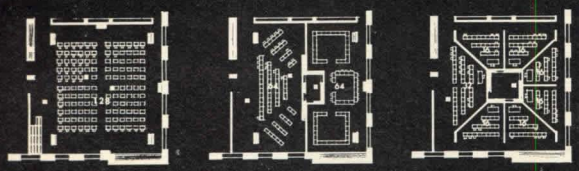




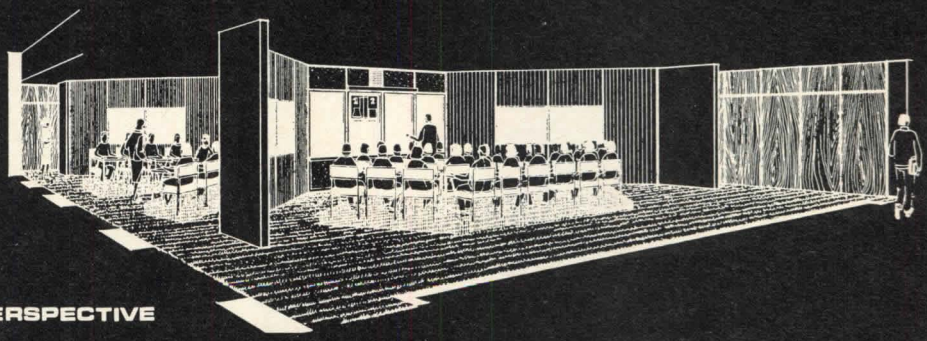
SECTION



PERSPECTIVE



CLASSROOM SEATING PLANS



PERSPECTIVE

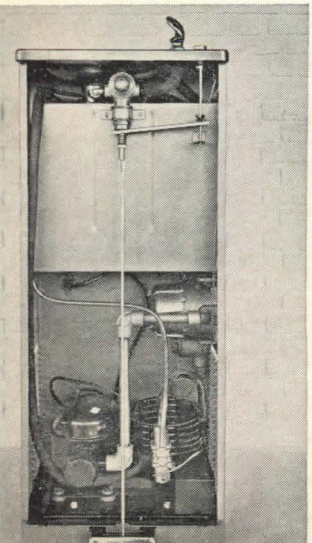
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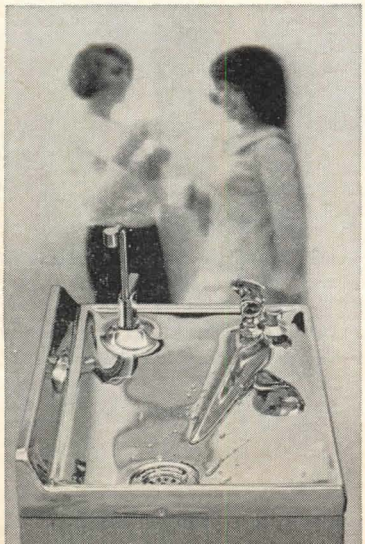
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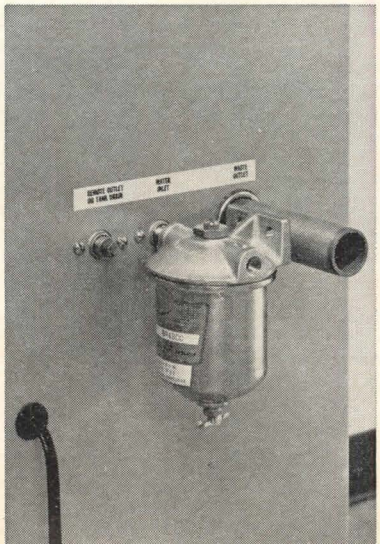
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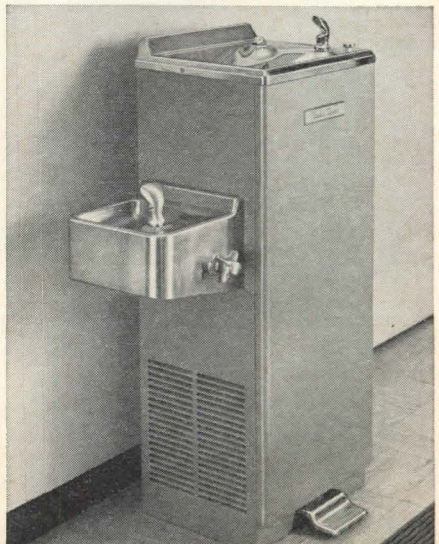
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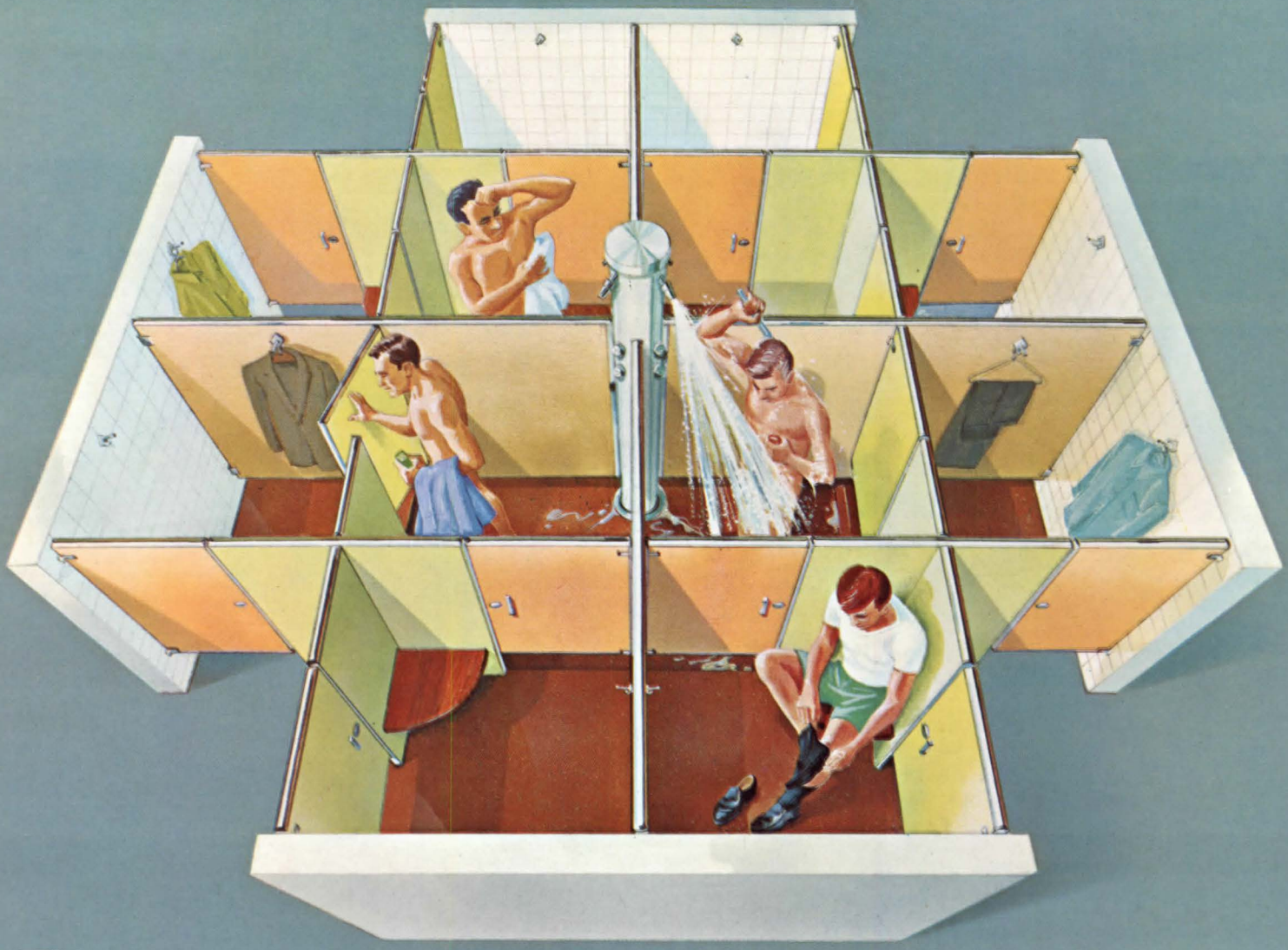


CREDITS: *Architect:* Roger Lee Associates. Stucco supplied by California Stucco Products Co., San Francisco. John Catanesi, Plastering Contractor, Richmond, Cal.

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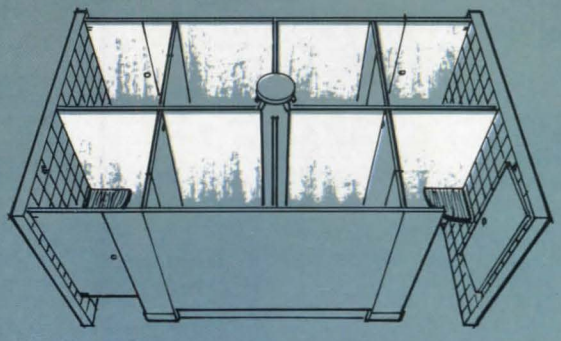
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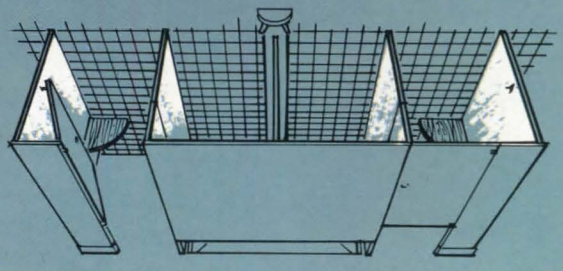
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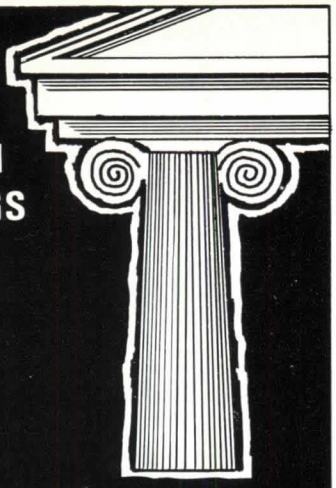
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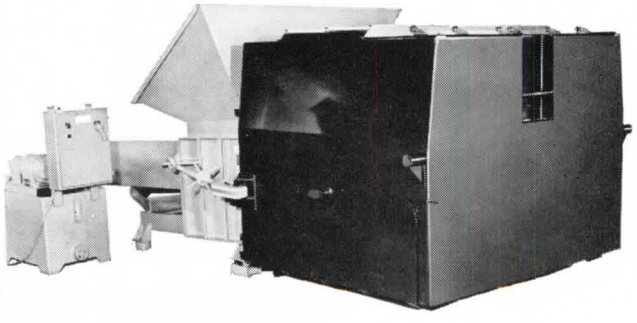
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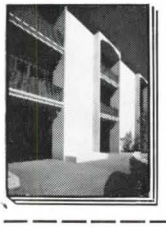
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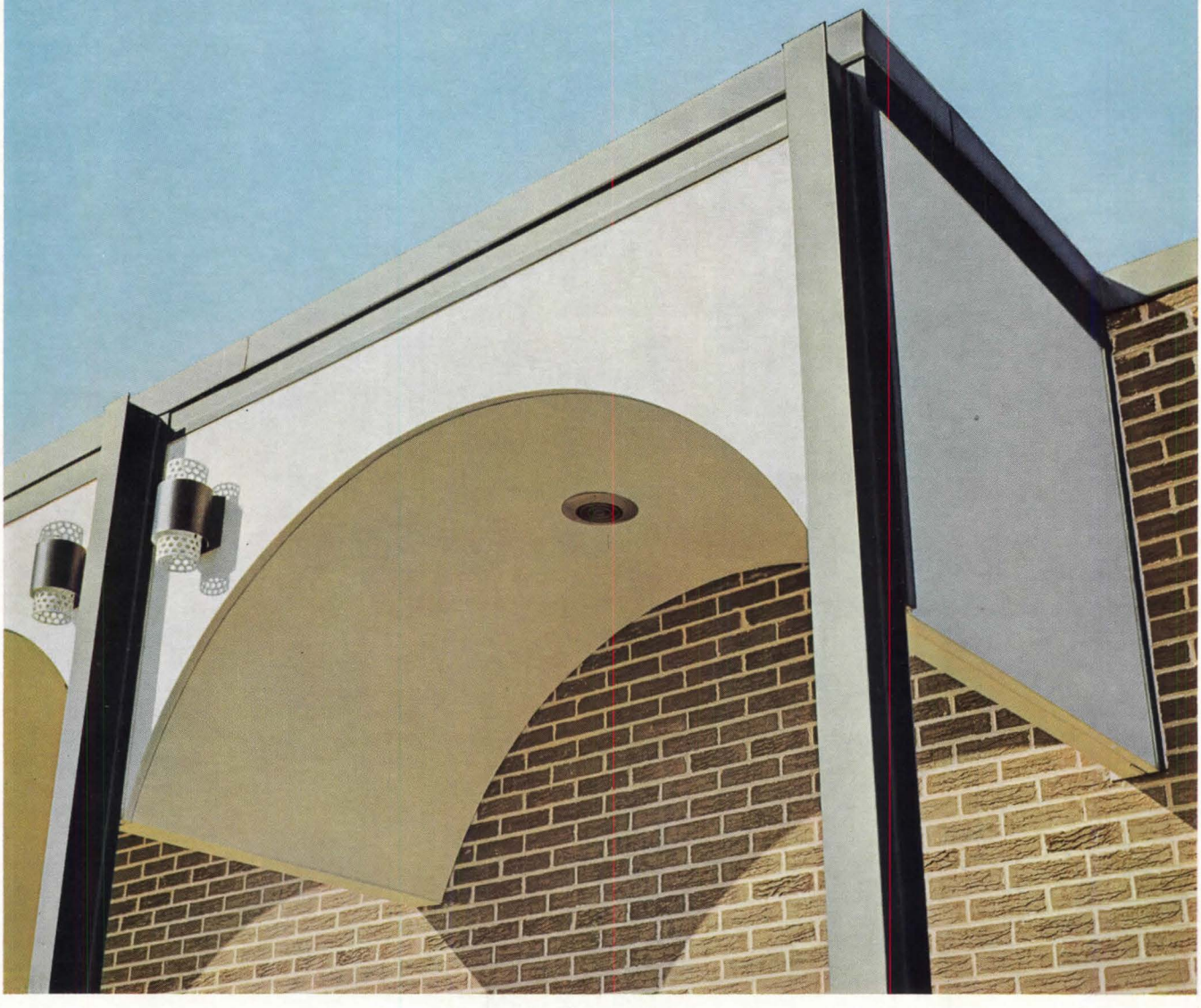
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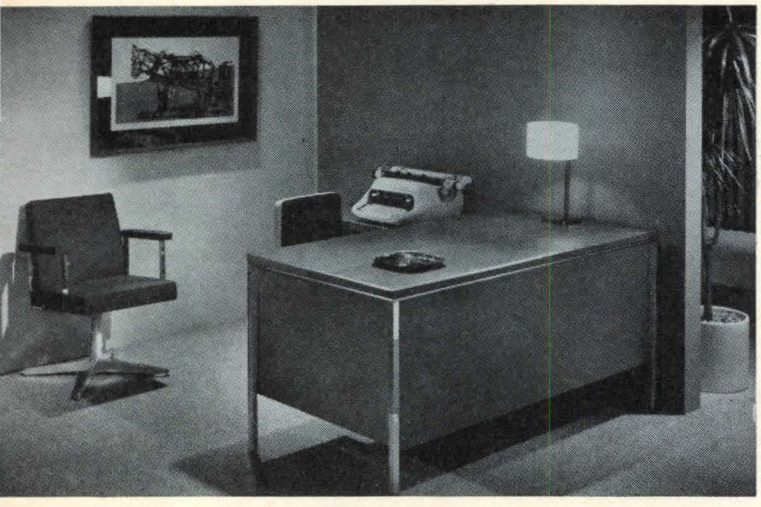
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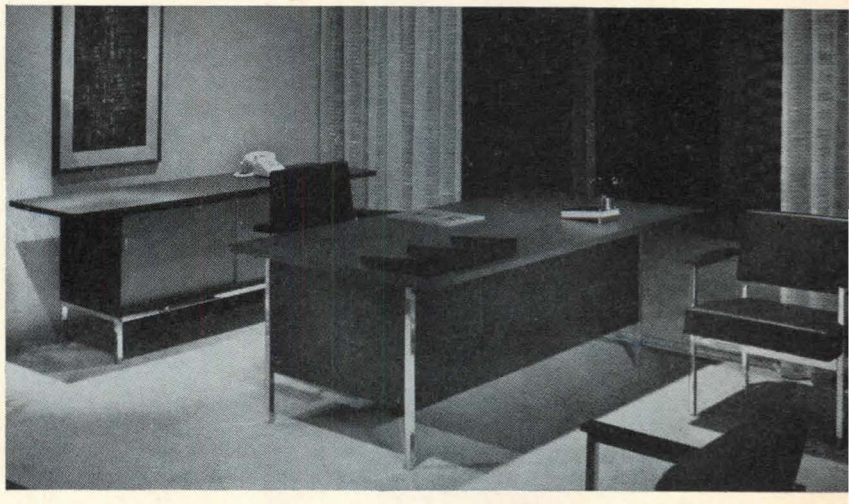
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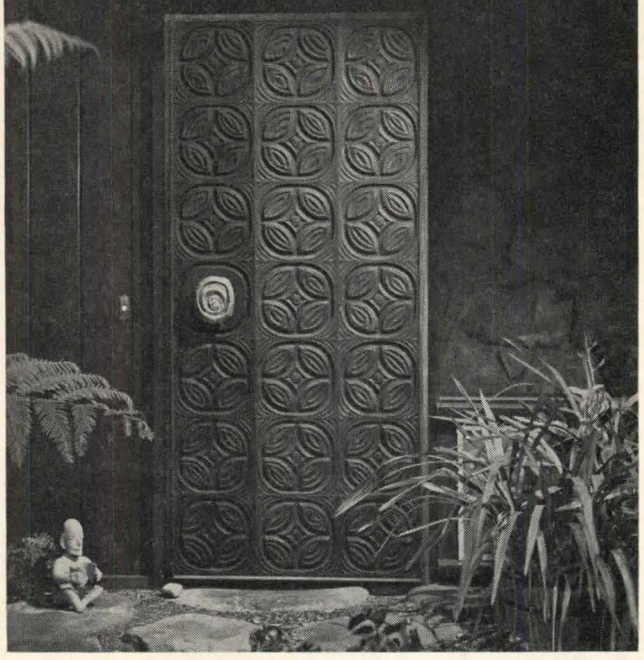
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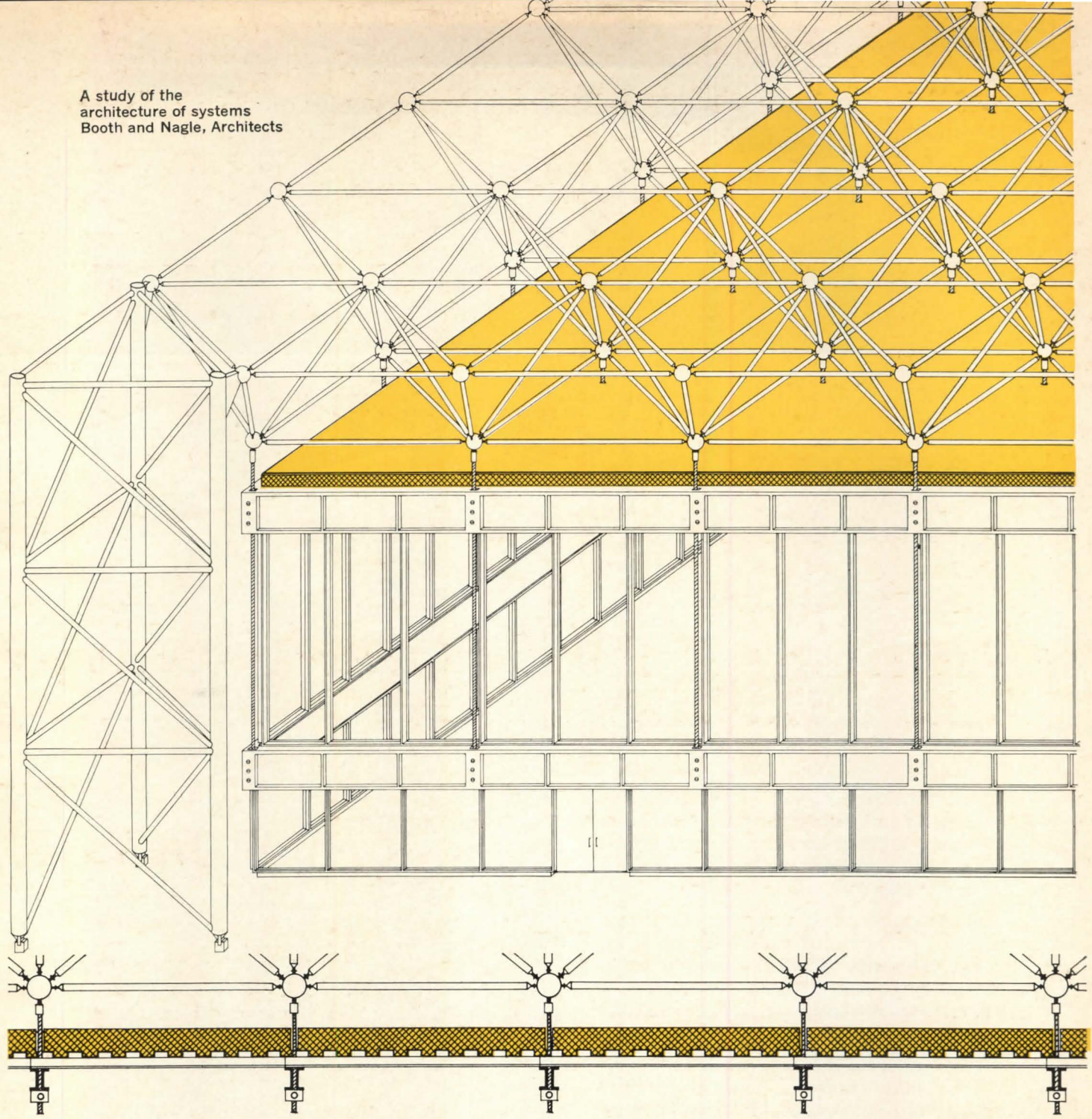
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Instead of using structural steel like wood, as is customarily done, this design takes advantage of the tensile strength inherent in the material. A triangular lightweight-steel spaceframe spanning 250 feet is assembled on the ground and raised into position by hoists that are supported by tripods located at the three corners. The roof, constructed of typical steel channels and steel centering covered with lightweight insulating Zonolite concrete, is hung from the spaceframe. The glass and steel perimeter walls are suspended from and supported by cables.

The Elegant Solution

Zonolite® lightweight insulating concrete roof decks are in themselves elegant solutions, because they solve a multitude of problems with beautiful simplicity.

Weight: Zonolite insulating concrete has as little as 1/6th the weight of ordinary concrete.

Insulation: Specified insulation value can be obtained simply by varying the thickness.

Fire Ratings: Fire ratings can be obtained with a Zonolite lightweight insulating concrete roof deck system.

Flexibility: This concrete can be used with form boards, galvanized metal or structural decks.

Permanence: Won't rot or decompose, lasts the life of the building.

Drainage: Slopes for drainage as prescribed by the built-up roofing industry are easily and economically provided.

Economy: Because of the speed and ease of application, the original cost is remarkably low.

Application: It is certified to be as specified, by the Approved Zonolite Roof Deck Applicator and Zonolite Division, W. R. Grace & Co..

GRACE **Zonolite Division, W. R. Grace & Co.**
135 South La Salle Street, Chicago, Illinois 60603 AEN '67

Gentlemen:

Please send me catalog CA-140, with complete specifications and technical data, on Zonolite lightweight insulating concrete roof deck systems.

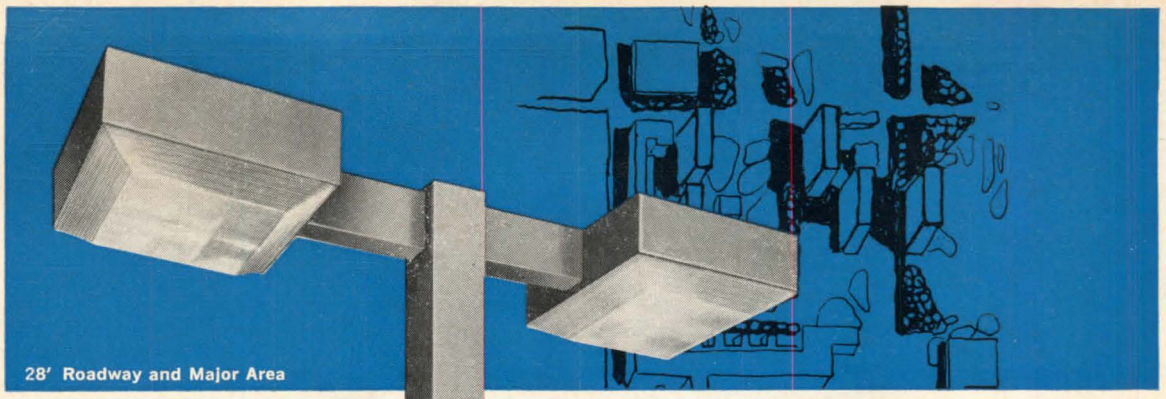
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Aesthetic Unity Through Site Lighting

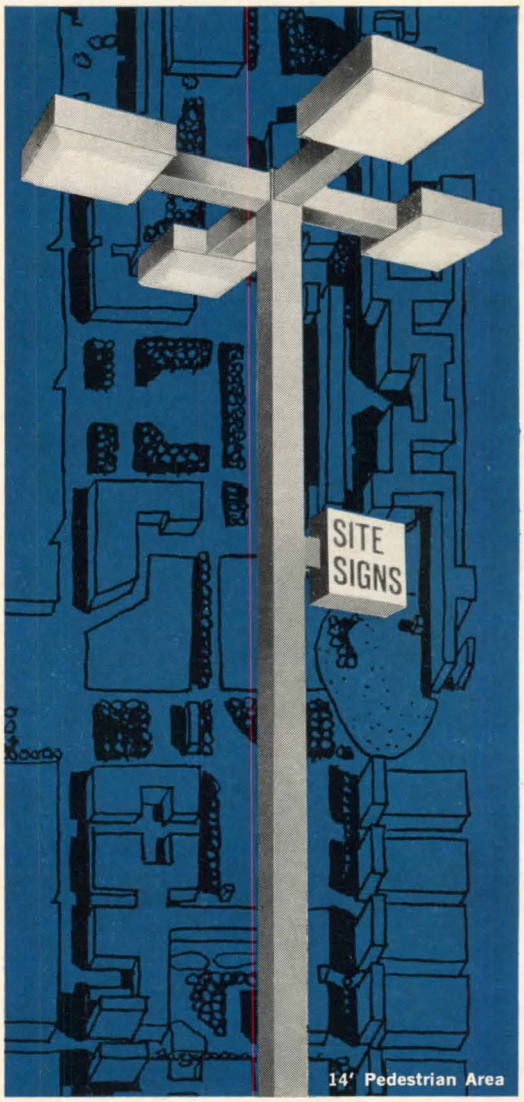
With the introduction of the Site Module Series, Moldcast presents the architect with an important new design medium through which site and structure are aesthetically unified.

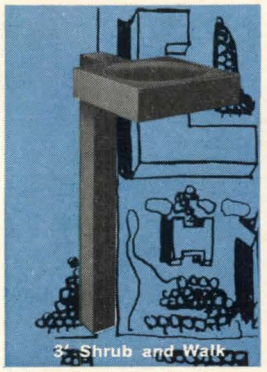
Moldcast Site Modules are the first *architecturally* conceived site lighting line... a tasteful harmony of squares and rectilineals which reflect the geometry of modern building design. They provide an exciting opportunity to extend the character of the building throughout the site.

Site Modules are a complete family of coordinated fixtures, designed to fill the lighting requirements of an entire site. Products range from 28 foot tall area and roadway lights to 3 foot shrub lights with matching directional signs and building mounted fixtures.

These handsome units are furnished with engineered optical systems providing the finest in highly efficient, controlled lighting distribution.

For complete technical information, send for our 16 pg. full color catalog.







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Serving Architecture Through Lighting

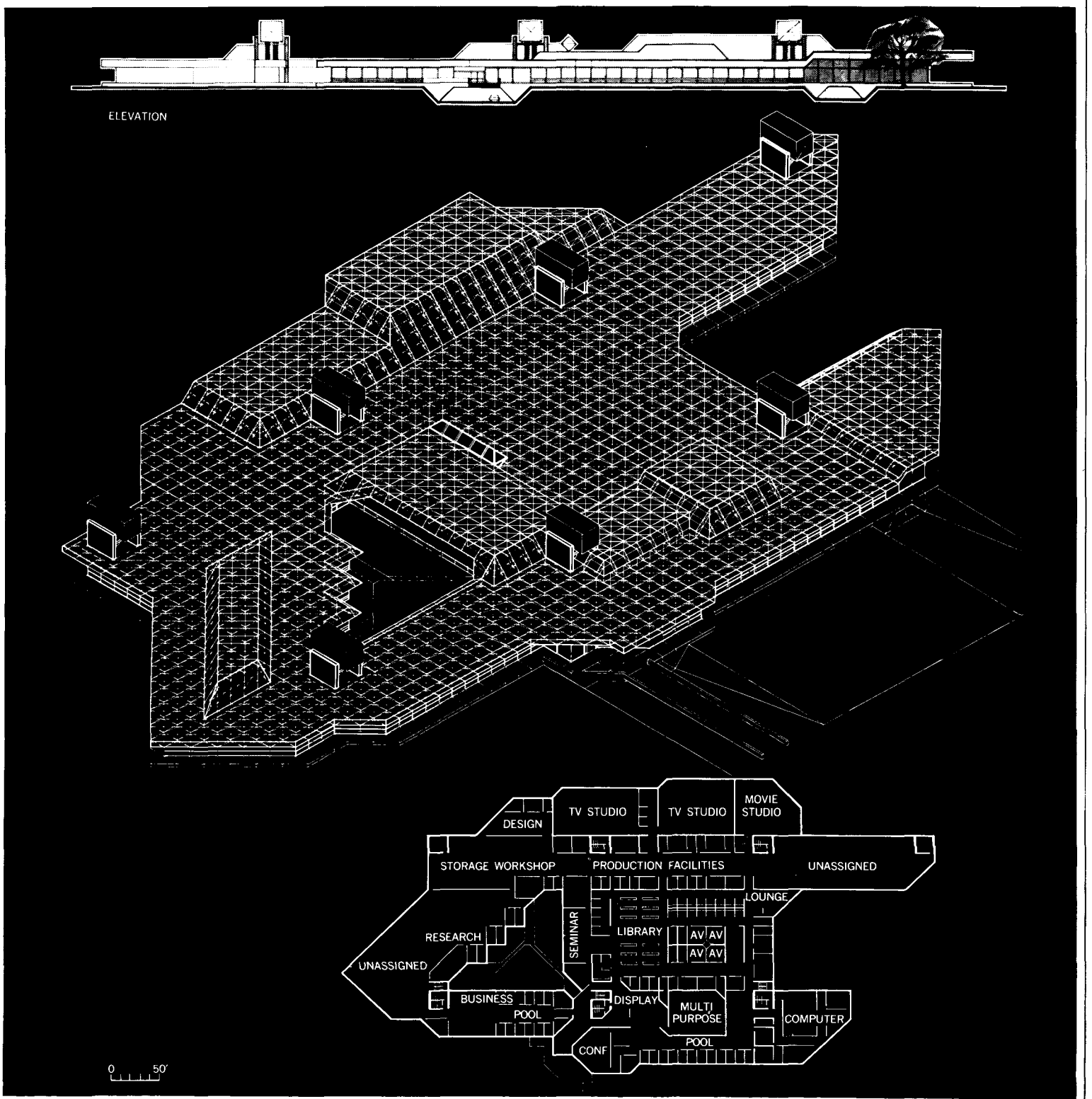
PREVIEW

EDUCATIONAL RESEARCH LAB

In their "conceptual design" for an educational laboratory, Eric Defty & Associates, architects-planners, are aiming for the utmost relevance to the building technologies of today. This would parallel the work of the laboratory itself, in its own field.

The client is the Central Midwestern Regional Educational Laboratory Inc. of St. Ann, Missouri, whose purpose is educational research, information, and innovation—not only to "put into practice what we already know," says Defty, "but, of more significance, to close the time gap between research and discovery on the one hand, and diffusion and application in the classroom on the other." More specifically, this means developing new curriculum materials, preparing programs for teachers, making extensive use of visual aids.

The architectural program was difficult to establish, not only because of the unknown needs of the future, but also because of the lack of a prototype. The essential element is thus flexibility—"maximum flexibility without compromising the esthetic quality of the building form or the surrounding environment." Toward this end, partitions are adjustable, space is intended for multipurpose use as much as feasible, and expansion is possible in any direction.





SEALAIR WINDOW, available in projected, casement, top-hinged, double hung, sliding and vertically pivoted types—all of which give far better than industry standard performances in resistance to both water and air infiltration. Credits—Cleveland



Take the KAWNEER Sealair Window that stopped leakage...

The test chamber equivalent of a 4-inch rain and 70 m.p.h. winds can't make Sealair Projected Windows leak! Proved in independent laboratory tests to exceed Industry Standards at twice the amount of water.

finish it in PERMANODIC®...

This hard color finish adds warmth, new life, new beauty to your designs. Choose from light bronze, medium bronze, dark bronze or black.

see the difference complete quality control makes...

The rich colors of Permanodic are created from alloys—not dyes. They are almost twice the thickness and hardness of clear anodized finishes. They are non-fading, resist corrosion, abrasion and the dulling effects of time, weather and industrial atmosphere.

It's impossible to specify a finer hard color finish than Permanodic. Kawneer quality control begins with the aluminum billet and continues through installation by an Authorized Kawneer Dealer.

For more details, phone the Authorized Kawneer Dealer in your area or write: Kawneer Product Information, 1105 N. Front St., Niles, Michigan.

INGENIOUS PRESSURE EQUALIZATION SLOT. Pressure within window sections equals that outside building. No siphoning action —no leakage.

KAWNEER
ARCHITECTURAL PRODUCTS
AMAX ALUMINUM

New Dynamics in Architectural Aluminum

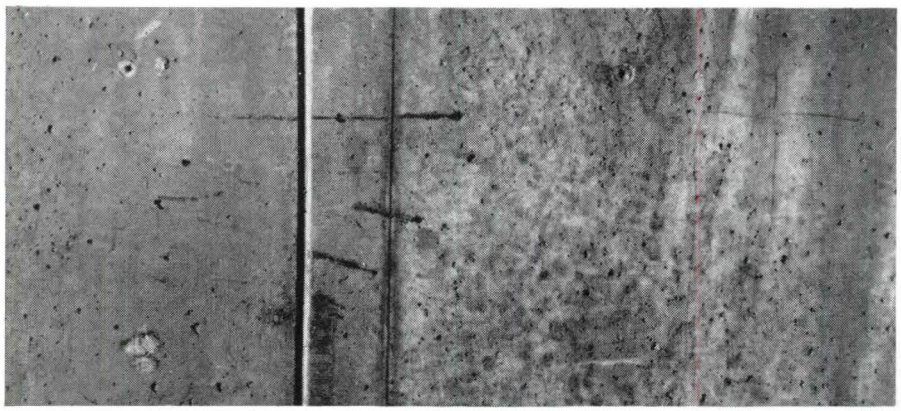
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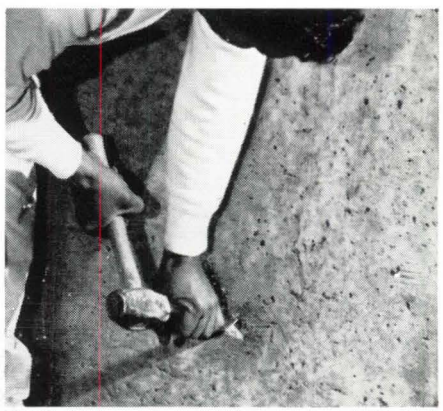
stop rubbing concrete!

SAVE TIME, LABOR AND MONEY—CREATE A WATERPROOF, POSITIVELY BONDED SURFACE WITH

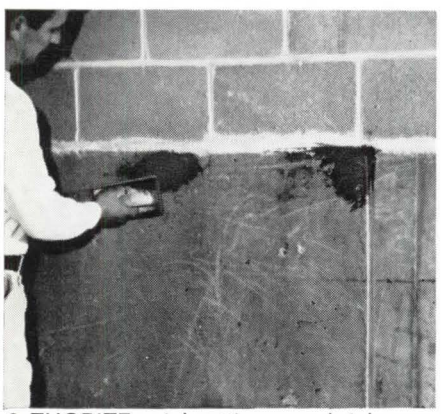
THOROSEAL PLASTER MIX AND ACRYL 60



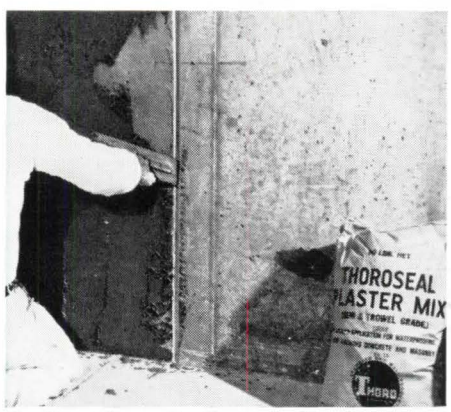
BEFORE 1. Concrete wall showing imperfections, varying gradations of color, honeycombing and protruding tie rods.



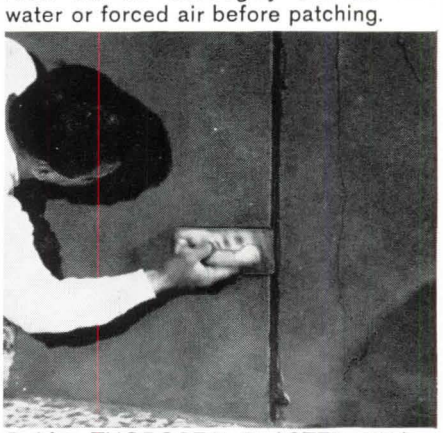
2. Workman removes loose concrete and cuts back tie rods too close to surface. Area will be thoroughly cleaned with water or forced air before patching.



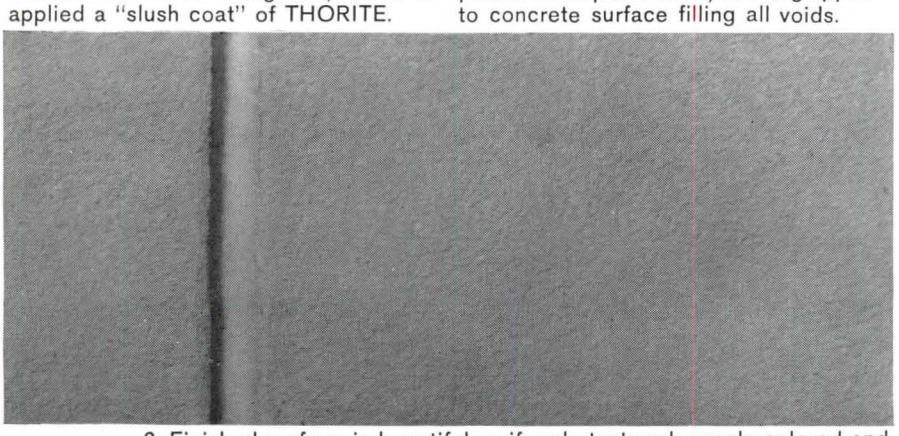
3. THORITE quicksetting, nonshrink, nonstaining patching mortar, is being forced into holes. Before doing this, workmen applied a "slush coat" of THORITE.



4. Trowel application of THOROSEAL PLASTER MIX-PLUS-ACRYL 60* (one part to three parts water) is being applied to concrete surface filling all voids.



5. After THOROSEAL PLASTER MIX has set, so it will not roll or lift, workman follows with a sponge float and the surface is uniformly floated.



AFTER 6. Finished surface is beautiful, uniformly textured, evenly colored and boasts complete waterproof protection that lasts as long as the wall stands! And—no rubbing!



Find out more about how you can save time and money by eliminating concrete rubbing costs. **Write** for Cir- #95 today

*For a strong, positive bond, use job-tested ACRYL 60 whenever you use THOROSEAL PLASTER MIX.

S T A N D A R D D R Y W A L L P R O D U C T S , I N C .

DEPT. 67-AF-3, NEW EAGLE, PA.

SDW116





'taint paint

'This is stain."

'Are you sure?"

'Positive. Olympic Solid Color Stain. Hides like expensive paint. But it costs a lot less. Easier to apply, too. Even over old paint. And it doesn't make a thick film over the wood; you can still see the natural beauty of the texture. Oh, and it's guaranteed. Won't crack, peel, flake or blister."

'That's a promise?"

'In 30 beautiful, living colors."

Olympic Solid Color Stain

'tis beautiful

"This is Olympic Semi-Transparent Stain."

"Beautiful!"

"Exactly. See how it adds color and depth without hiding the natural richness of the wood?"

"Really shows off the grain and texture, doesn't it?"

"Right. And in 36 tones. That's why architects like it. And builders. 'Fact, anybody who likes wood likes Olympic."

"I like wood."

"I *knew* you were my kind of people."

Olympic Semi-Transparent Stain

For color samples on wood and new A.I.A. Information Manual, write Olympic Stain Company, 1118 N.W. Leary Way, Seattle, Washington 98107

AVANT GUARD.

What's avant these days? Lever handles. Especially if they have a pure look. Sleek, sophisticated, straight. But Yale makes sure they do something else besides look good. Guard.

Jefferson lever handle shown with Yale Mono-Lock.

YALE® LOOKS AS GOOD AS IT LOCKS

THE FINEST NAME IN LOCKS AND HARDWARE



Yale is a division of

EATON YALE

Distinctive Architecture and Electric Space Conditioning Build Repeat Patronage for Connecticut Motor Lodge



THE CASE — The architects' design for the Niantic Motor Lodge at Niantic, Conn., accomplishes two objectives vital to the operation of a motel: it captures the attention of passing motorists and—once they are stopped—offers such attractive conveniences the travelers come back again and again.

The first objective was achieved in the Niantic development through a happy combination of site and architecture. The motel is situated atop a rolling hill and is visible for a considerable distance in each direction from Exit 74 on the Connecticut Turnpike. At night, extensive exterior illumination helps catch the road-weary eyes of high-speed drivers.

The distinctive zigzag roof line and contrasting buff-colored brick with pastel curtain wall panels and redwood trim on the exterior make the two-story building appealing in its natural setting.

As for the second objective—comfort and convenience—the architects and the motel owners incorporated several features. A core building, flanked by two guest wings, houses a first-floor restaurant, coffee shop, and manager's apartment. A terraced cocktail lounge is located on the second floor.

Guest rooms on the second floor have wood-beamed "cathedral" ceilings, following the zigzag roof line. For each of the 100 guest units, self-contained, through-the-wall electric heating-cooling units with individual room controls were selected. The public rooms are conditioned by electric air conditioners and duct heaters.

THE HISTORY—Niantic's manager, Robert Gramitt, says: "Comparing electricity with oil and gas, I find that electricity is cleaner and more efficient, requires less maintenance, and is flexible and convenient. The combination units with individual controls are particularly convenient for both guests and employees. Guests seem to like the fact that they can have either heating or cooling at the push of a button. Perhaps this is one of the reasons why the same people stay with us time and time again."

SEE REVERSE SIDE FOR DETAIL INFORMATION

1 CATEGORY OF STRUCTURE:
Motel and Restaurant

2 GENERAL DESCRIPTION:
Area: 34,000 sq ft
Volume: 280,000 cu ft
Number of floors: two
Number of occupants: 35 plus guests
Types of rooms: 100 guest rooms, cocktail lounge, restaurant, coffee shop, kitchen, manager's apartment, offices

3 CONSTRUCTION DETAILS:
Glass: double in guest rooms, single elsewhere
Exterior walls: 4″ brick, 8″ block, 1½″ rigid insulation (R/5), ½″ gypsum board. U-factor: .15; curtain wall with rigid insulation (R/8). U-factor: .10
Roof or ceilings: built-up roof over 2″ rigid insulation (R/6), 2″ wood deck. U-factor: .11
Floors: concrete slab; perimeter insulation
Gross exposed wall area: 9,000 sq ft
Glass area: 3,500 sq ft

4 ENVIRONMENTAL DESIGN CONDITIONS:
Heating:
Heat loss Btuh: 886,000
Normal degree days: 6,000
Ventilation requirements: 10-15 cfm/person
Design conditions: 0° F outdoors; 70F indoors
Cooling:
Heat gain Btuh: 900,000
Ventilation requirements: 10-15 cfm/person
Design conditions: 95F dbt, 75F wbt outdoors; 75F, 50% rh indoors

5 LIGHTING:
Levels in footcandles: 20-50
Levels in watts/sq ft: 1-2.5
Type: fluorescent and incandescent

6 HEATING AND COOLING SYSTEM:
Guest rooms have self-contained, through-the-wall electric heating-cooling units with individual room controls. Guests can have heating or cooling or fresh air as desired. Public rooms are conditioned by one seven-and-a-half-ton electric air conditioner and one four-ton electric air conditioner and duct heaters.

7 ELECTRICAL SERVICE:
Type: underground
Voltage: 120/208v, 3 phase, 4 wire
Metering: secondary

8 CONNECTED LOADS:

Heating & Cooling (82.5 tons)	350 kw
Lighting	65 kw
Water Heating	120 kw
Cooking	96 kw
Other	20 kw
TOTAL	651 kw

9 INSTALLED COST:*

General Work	$354,500	$10.45/sq ft
Plumbing & Mech.	120,000	3.55/sq ft
Electrical	76,500	2.25/sq ft
Sitework	85,000	2.50/sq ft
TOTALS	$636,000	$18.75/sq ft

*Building was completed 7/64

10 HOURS AND METHODS OF OPERATION:
24 hours a day, seven days a week.

11 OPERATING COST:
Period: 7/2/65 to 7/1/66
Actual degree days: 6,038
Actual kwh: 869,040*
Actual cost: $14,175.71*
Avg. cost per kwh: 1.63 cents*
*For total electrical usage

Billing Date	Degree Days	Demand	kwh	Amount
8/3/65		225	76,320	$ 1,291.15
9/3/65		216	78,720	1,280.80
10/4/65	110	181	45,120	868.06
11/4/65	426	147	47,040	825.85
12/3/65	753	320	64,320	1,326.16
1/3/66	961	220	108,000	1,513.00
2/3/66	1186	294	138,720	1,903.14
3/3/66	1008	229	88,320	1,393.75
4/4/66	792	164	77,040	1,070.08
5/3/66	534	168	50,400	917.20
6/3/66	268	194	46,800	909.40
7/1/66		160	48,240	877.12
TOTALS	6038		869,040	$14,175.71

12 UNUSUAL FEATURES:
Individual controls in guest rooms. Public areas split into two independent zones, each served by a separate unit.

13 REASONS FOR INSTALLING ELECTRIC HEAT:
A study revealed that an electric space conditioning system would be economically feasible. The owners chose an electric system over flame fuel systems because they felt that the electric system offered these important advantages: it would permit individual room control; it would enable guests to have either heating or cooling at the push of a button; it would be clean, safe and dependable; and it would require less maintenance. The system has been in use for almost three years now and has lived up to every expectation.

14 PERSONNEL:
Owners: Shoreline Motor Lodge, Inc.
Architects: Professional Associates
Consulting Engineers:
Mechanical: Burton & Van Houton
Electrical: V. P. Juselis
General Contractor: Ernest F. Carlson
Electrical Contractor: Associated Electric Co.
Utility: The Connecticut Light & Power Company

15 PREPARED BY:
Ralph Marrone, Manager of Sales Technical Services, The Connecticut Light & Power Company.

16 VERIFIED BY:
W. J. Otorowski, Architect

Robert L. Van Houton, P.E.

The Consulting Engineers Council USA, has confirmed the above categories of information as being adequate to provide a comprehensive evaluation of the building project reviewed.

Gentlemen:
Please send the complete series of Electric Heating Case Histories as they become available to me at the following address:

Name and Profession: _____
Firm, University or other affiliation: _____
Address: _____

NOTICE: This is one of a series of case histories of buildings in all structural categories. If you are an architect or consulting engineer; an architectural or engineering student; an educator; a government employee in the structural field; a builder or owner, you may receive the complete series free by filling out the strip coupon at the left and mailing it to EHA. If you are not in one of the above categories, you may receive the series at nominal cost.

ELECTRIC HEATING ASSOCIATION, INC. 750 THIRD AVE., NEW YORK, N.Y. 10017



General Offices, Elwin G. Smith & Company, Inc., Pittsburgh, Pa. Architect: Williams-Trebilcock-Whitehead, Pittsburgh, Pa. General Contractor: Mellon-Stuart Company, Pittsburgh, Pa.

SMITH METAL WALLS are attractive, compatible, practical. They are designed, manufactured, shipped and erected by a Single Responsibility . . . Smith. Look for details in Sweets' Architectural File 20b/Sm or call your nearest Smith Office. For additional views of this installation, write on your letterhead to:

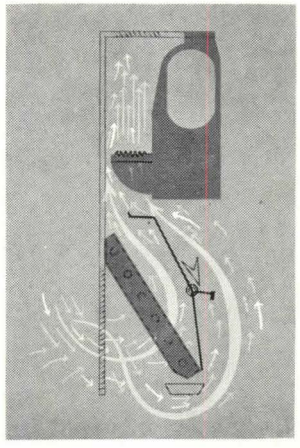
SMITH

ELWIN G. SMITH & COMPANY, INC. Pittsburgh, Pa. 15202 / Atlanta
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Carrier Bypass Weathermaster Units. Bypass Weathermaster® units automatically maintain room temperature dialed by occupant. Units come complete with control that improves performance, eliminates valve problems, and reduces installation cost.

Bypass damper provides varying coil capacity from zero up to 100 percent. In this cutaway, damper blade is half open. In actual operation, the damper assumes instantly the exact position required to proportion properly the amount of room air permitted to flow over the coil. If no change in capacity is required, the damper is held stationary. Water temperature and flow rate through the coil are constant. This eliminates water valves and throttling noises.



Attractive to look at! Without an "or equal" –the reason's inside!

The photo shows one of the many architecturally attractive arrangements made possible by these high-velocity induction units.

The diagram shows how these units use the reliable and extremely simple bypass principle to provide automatic response to changes in a room's temperature requirements.

Nobody else has perfected a high-velocity induction unit embodying this principle.

And we say "perfected" with evidence of this Weathermaster unit's performance. Since introduction in 1936, more than 600,000 Carrier terminals have been successfully installed in high-rise buildings from coast to coast.

What advantages have these units? Design flexibility . . . factory-installed and factory-calibrated controls . . . instantaneous response to room temperature change . . . smooth and silent action, no water-throttling noises . . . water-control valves completely eliminated.

Besides being available with the automatic bypass control described here, these units come with a manual bypass or with water modulating capacity control. Models may be furred-in or installed in cabinets. Cabinets and accessory components offered in 7 decorator colors. All models ARI certified.

* * *

For complete information, get in touch with your Carrier representative. Or write us at Syracuse, New York 13201. Represented in Canada by Carrier Air Conditioning (Canada) Ltd.

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More people put their confidence in Carrier air conditioning than in any other make

miller Indigo

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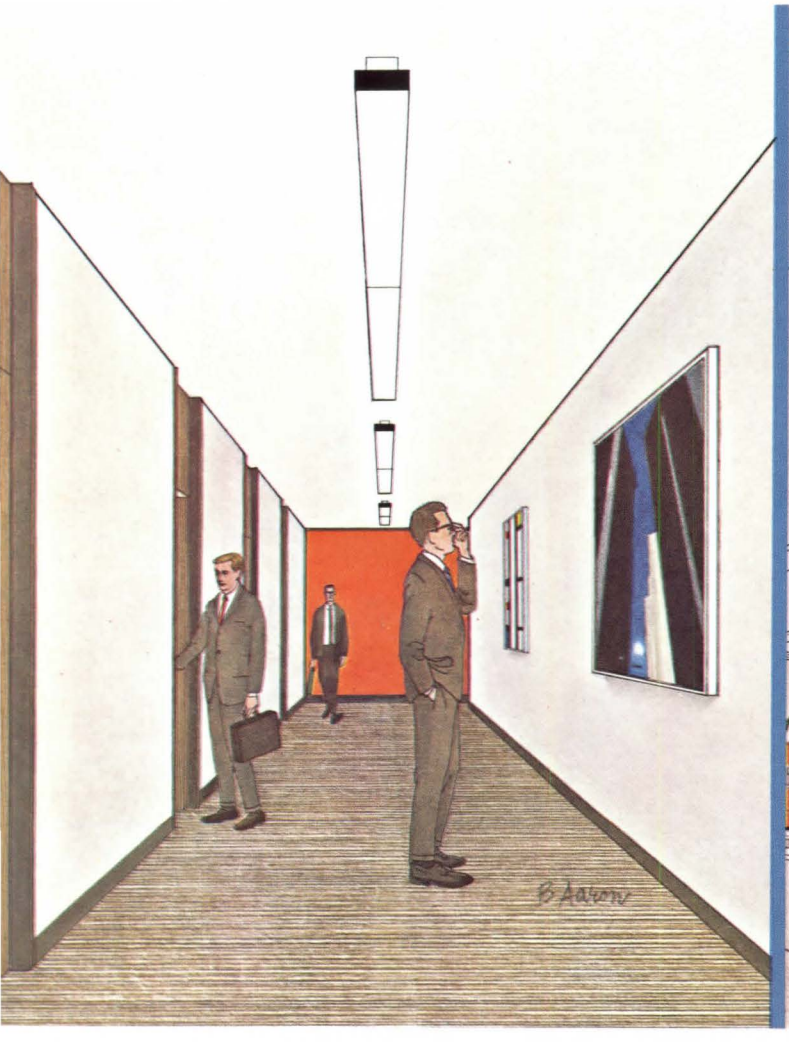
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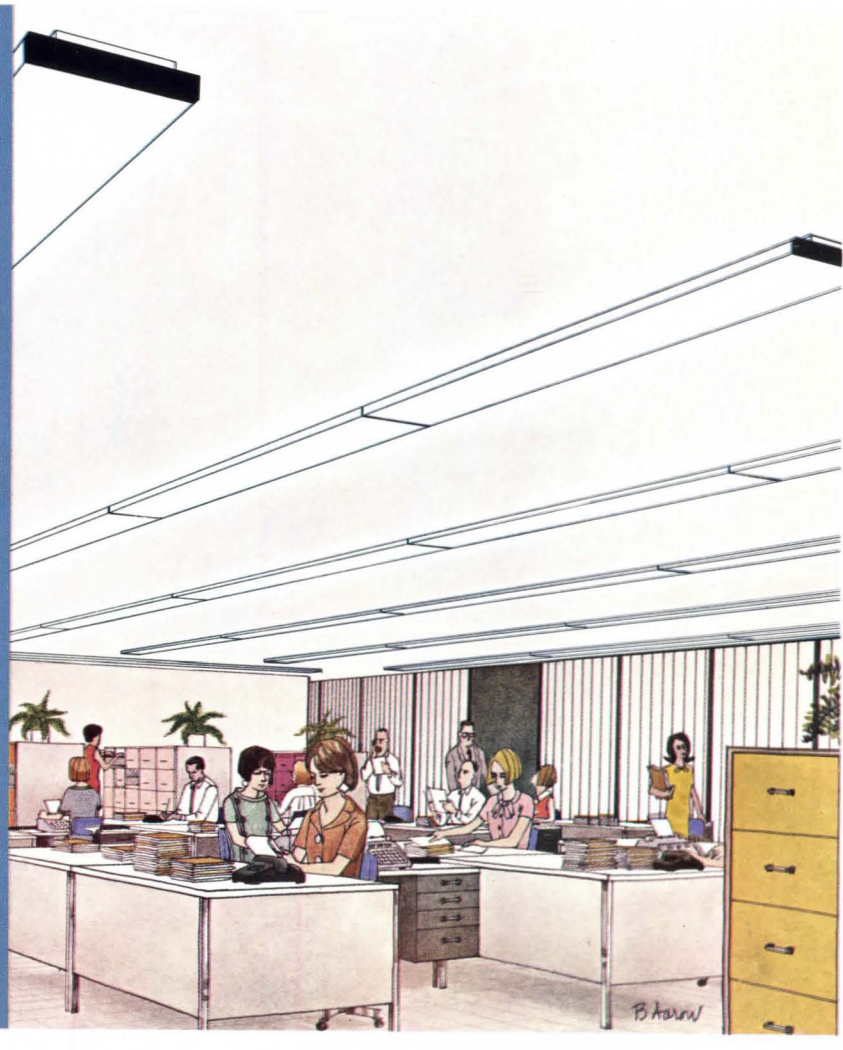
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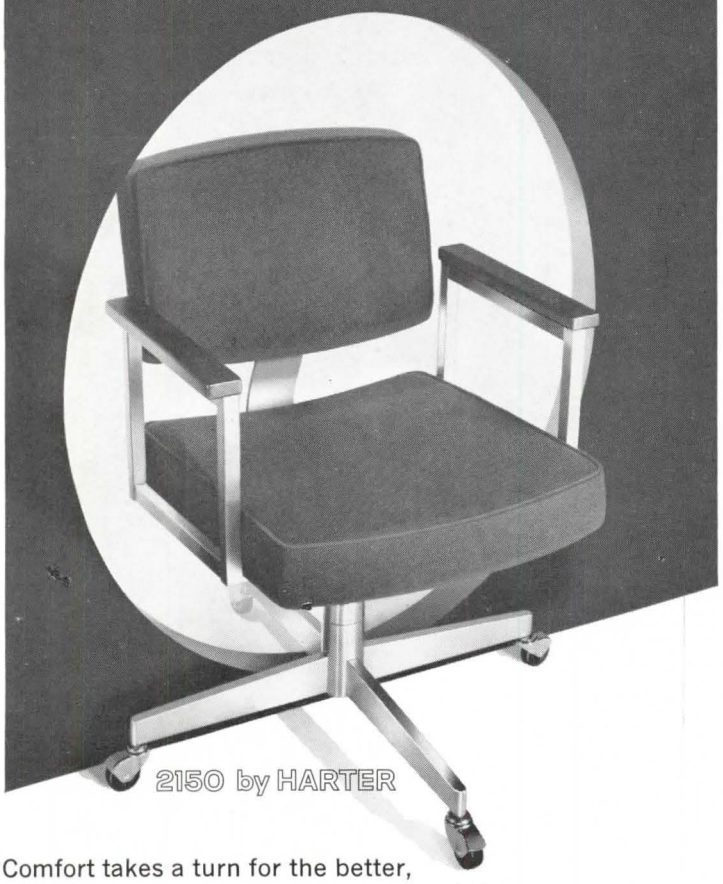




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BOOKS

(continued from page 77)

moved to the suburbs nor that the change which took place could be traced to the new environment. And . . . the suburbanites . . . were happy in their new homes and communities, much happier than they had been in the city."

How different this is from the picture painted by so many architects, planners, and social critic–journalists who see suburbs despoiling the landscape to produce anomie, adultery, mental illness, momism, and the rest! The difference in perceptions Gans ascribes to the difference in method of inquiry. Designers and critics catalog suburban shortcomings from their own perspective—"ethnocentrism" Gans calls it—and it leads them to think they know better what is good for the people they observe than the people themselves. In contrast, the social scientist argues that he "observes what people really do and say," that he looks at the world from the perspective of the people observed, and that he follows "a democratic method of inquiry; it assumes that people have some right to be what they are."

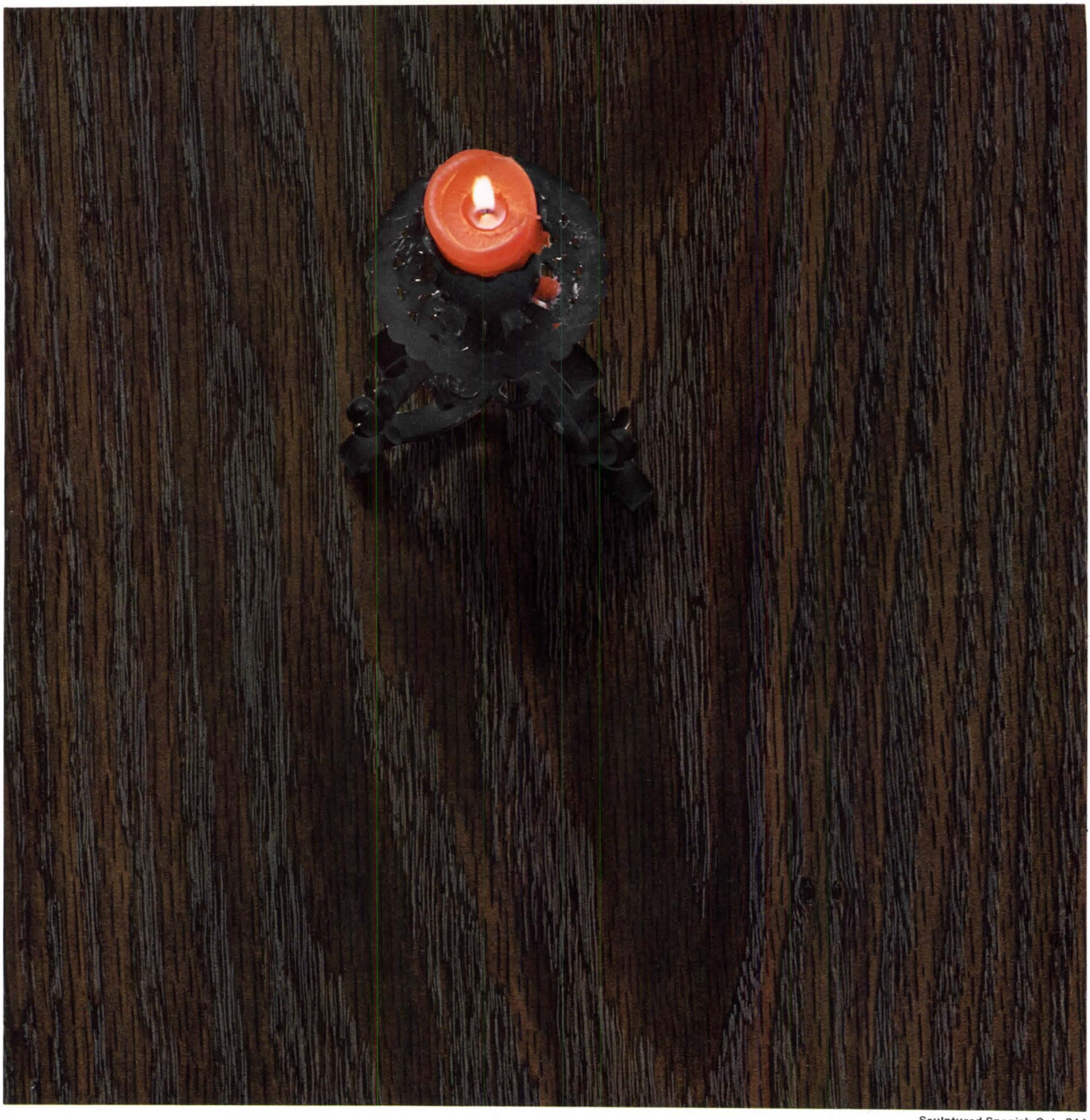
This profound difference in viewpoint makes *The Levittowners* hard going for architects and planners. The social science view that people know what is best for them seems practically unintelligible to professionals whose job it is to provide people with what they ought to have whether they want it or not. Yet the sad fact is this same professional outlook is responsible for the ineffectiveness of professional designers in shaping the large-scale environment. More than any specific findings about suburbia, the illumination of the social science approach makes this book valuable.

The book has weak points. The author sets out to find the joys of suburbia, and the fact that he finds them is something in the nature of a self-fulfilling prophecy. Clearly his biases blind him to some suburban problems. The difficulties for adolescents caught in Levittown stand out in his research, yet he seems callous in disregarding these troubles when drawing conclusions. After documenting the many ways in which Levittown is "Endsville" to high school kids—that less than 40 per cent of them like it compared with about 90 per cent of the adults—he ducks the problem by saying it is the fault of middle-class society. In reporting on the tendency of this suburb to encourage retaliatory vandalism, he quotes a twelfth grade girl saying, "I feel like a hood to be getting chased by the police for absolutely nothing." Yet for some curious reason (one can only suspect his pro-suburbia bias), he concludes, "The design deficiencies cannot be altered, and *should not be if they are a problem only to teenagers*" (emphasis added).

Gans begs off by saying the fault lies in our culture which has "a deep hostility" toward adolescents, "at bottom, sexual in nature." Yet the problems he cites—lack of places to go, impossibility to get anywhere without a car, houses designed for mothers and babies, not teenagers and families—all seem to be things uniquely susceptible to solution through improved physical design and settlement patterns.

Such apparent lapses are few. Throughout most of the book flows a stream of important findings. These stand out not only as impressive examples of the social science method Gans testifies for, but also as helpful insights for those charged with designing communities. He shows, for instance, that the fundamental social units to which families belong are the various intentional and unintentional town-wide social groups *formed* around interests, not spatial proximity, and the neighboring unit—not Neighborhood Unit—of some 10 families. In connection with the last point he argues that the block, when it holds many more than ten dwellings, and the whole neighborhood are weak units in social terms. If

(continued on page 138)



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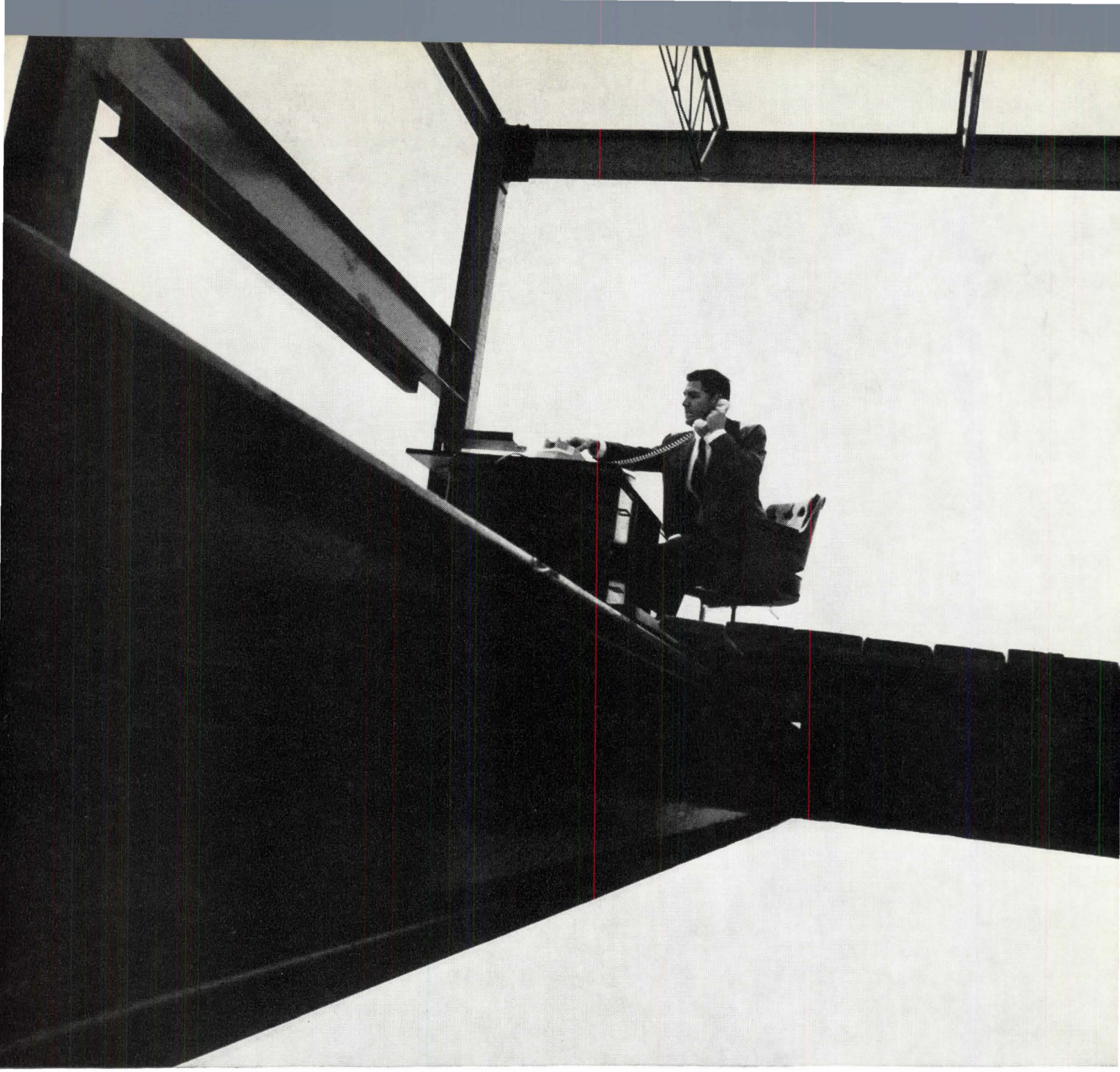
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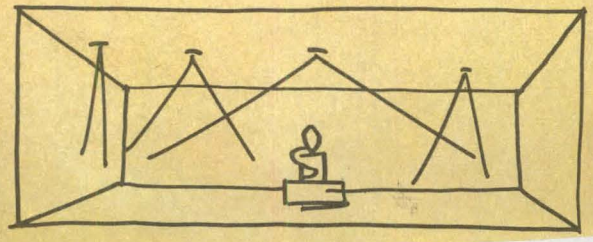
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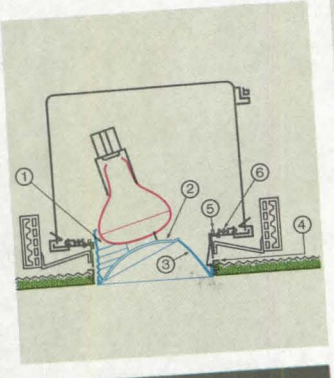
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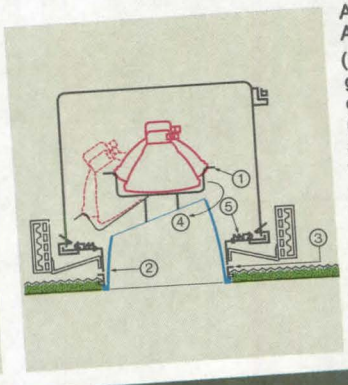
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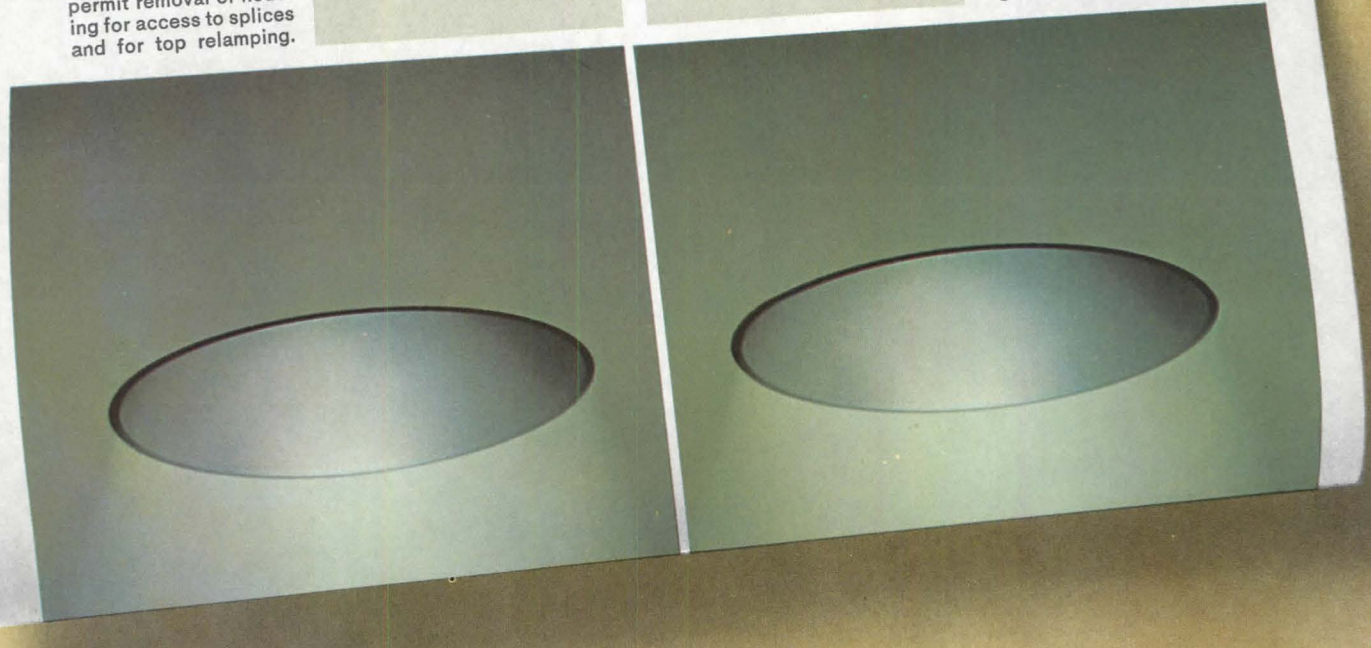
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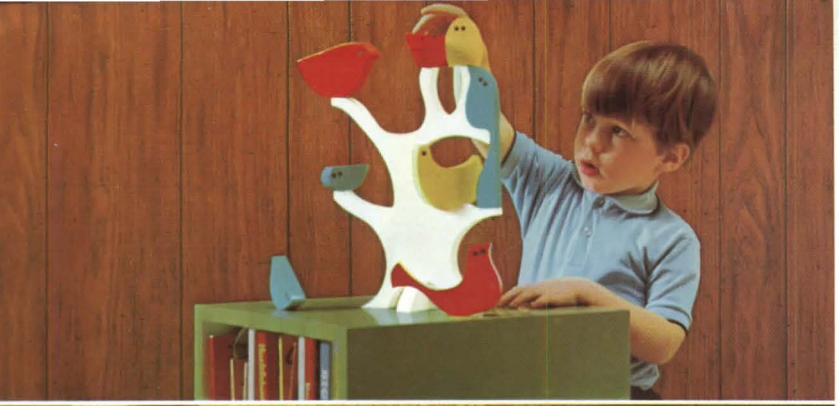




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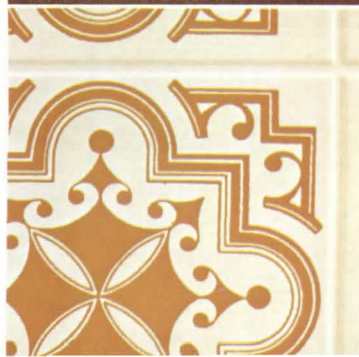
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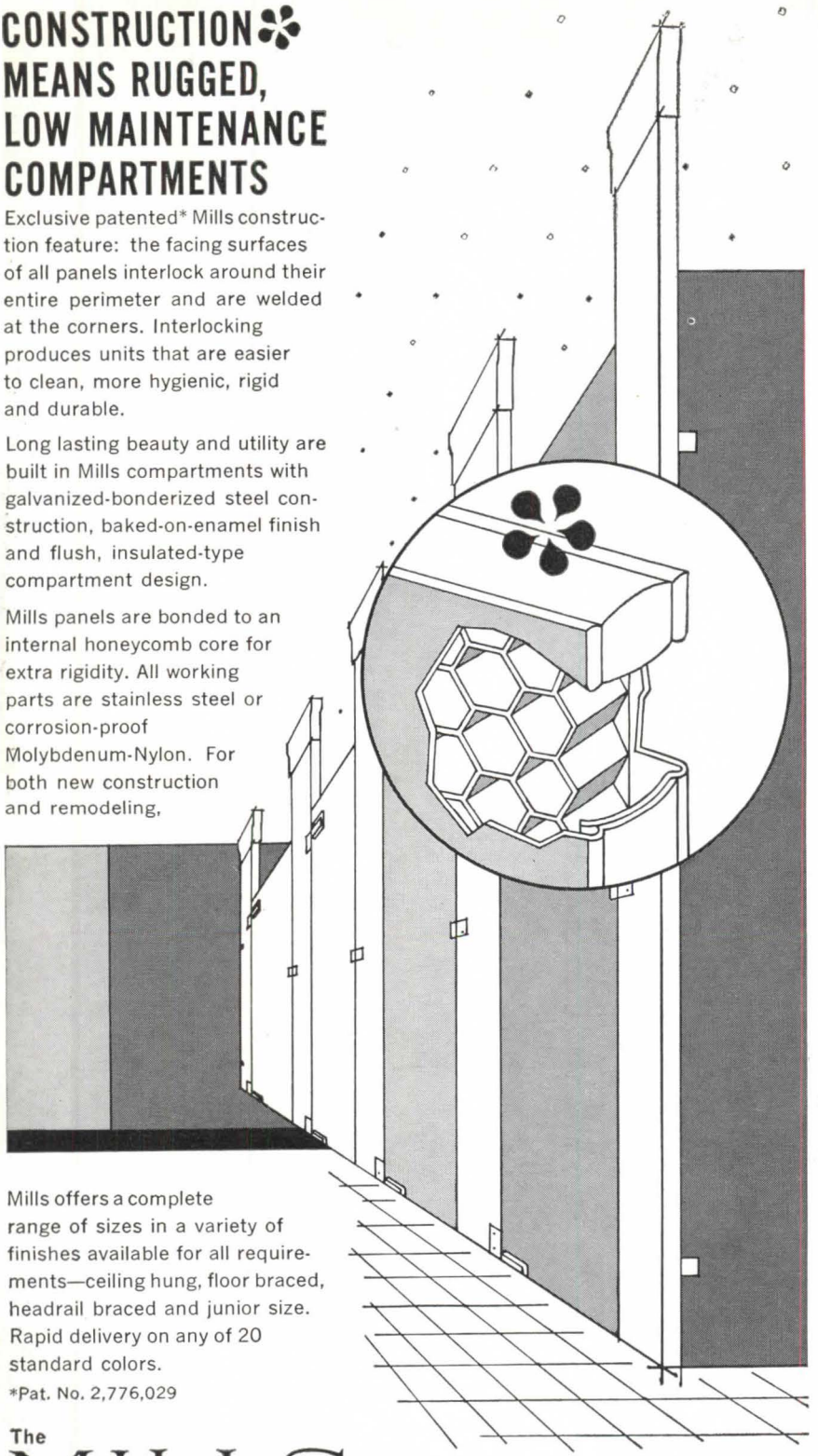


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BOOKS

(continued from page 132)

neighborhood has any social value it is only its convenience in designating the service area of a facility like a school or a shopping center.

The ten-family unit Gans has discovered in Levittown provides one of the few occasions on which he seems friendly toward a physical planning principle. He argues for a suburban pattern of closely related ten-family units which, in turn, are distinctly separated from each other. This he feels will provide the vital, mutually supporting social homogeneity where it counts, at the neighboring level; and will permit sharply increased heterogeneity at the elementary school level.

On the question of community centers, Levittown's experience suggests that a town does not need a center. Here Gans's findings again run counter to planners and architects who, in his words, "insist that every community must have a single physical and symbolic center." He reports, "for most Levittowners their own home was the center of the community, and . . . it determined the town's social structure and politics." Most have recently left old inner cities with centers and they apparently do not miss them for they report no grief at their absence.

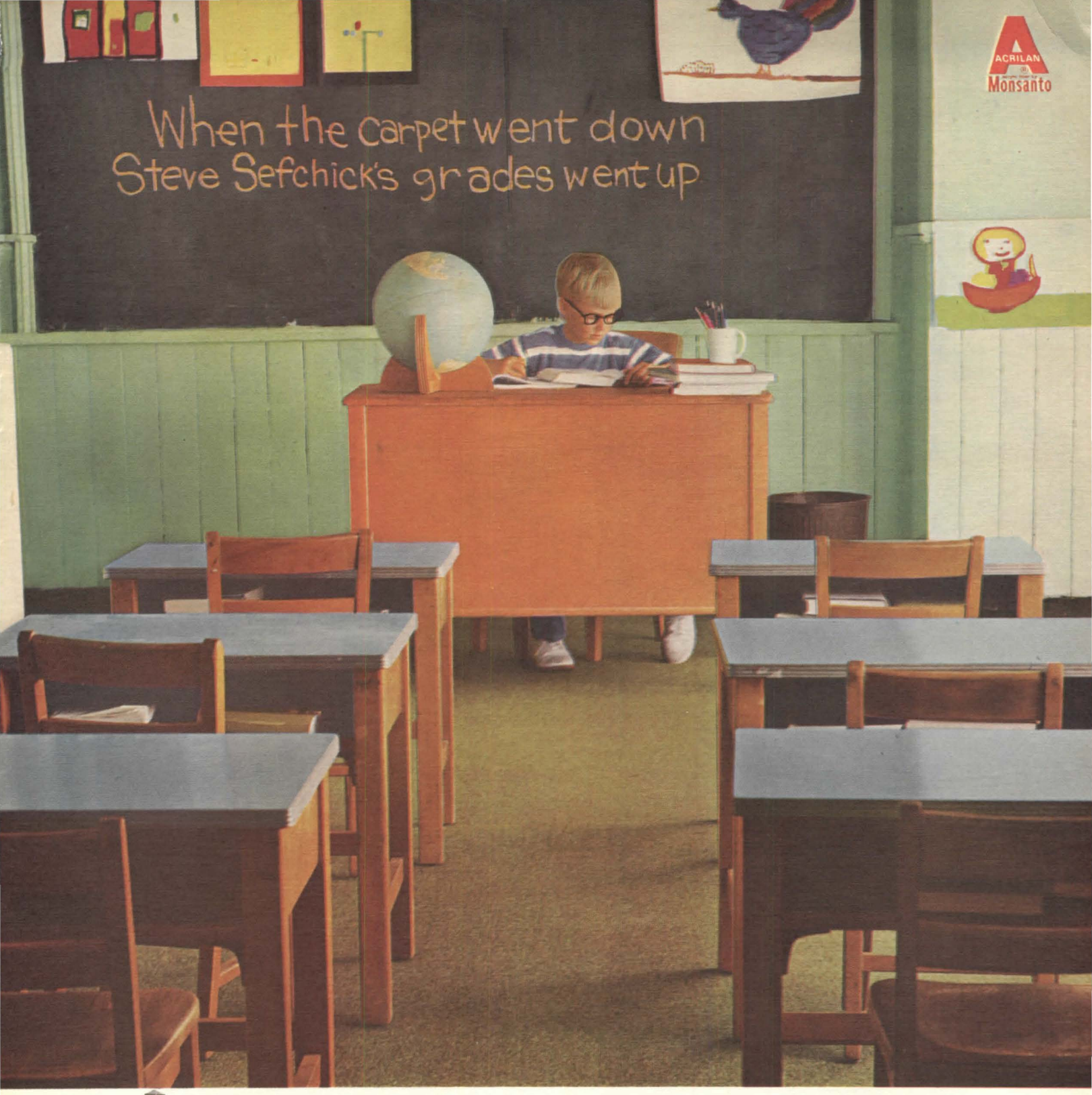
The observation that the house by far outweighs the importance of community layout is repeated elsewhere in other ways. The family spatial setting —the house—apparently figures importantly in family behavior, but the community spatial setting has only a weak influence, if any, on behavior of larger groups. These, Gans finds, are aspatial, depending *mainly on* interest relationships, not physical ones. What could be more shattering to the rationale for urban design?

Most of the middle of the book concerns whether or not the changes people underwent in Levittown were caused by the pattern of the community. He discovered and measured man changes. People visited mor participated more in organiza tional activities and churches they changed in health, morale and degree of loneliness. Bu these changes "can be traced t the social community, the im pact of people on each other. Homogeneity encouraged visitin and organizational activity; boosted morale. What loneliness appeared came from situation where people were cut off fro others like themselves. "Ult mately, then," says Professo Gans, "the primary source o change was the population mi of Levittown."

At several points he examine the question of change and th planning process to discove what makes it work, or mor often what makes it fail to pro duce the results the professional want. In contrasting the success ful social engineering whic achieved desegregation of Levi town with the ineffectual effort in land-use planning. Professo Gans pins down some helpfu principles for directing change Success depends upon modifyin behavior, not changing attitudes and intense focus on particula work in hand rather than broa concern for a spectrum of goo things.

In a similar vein and apropo of the continual exhortation against sprawl and uglines Gans comments, "Beliefs canno be altered by demonstrating thei inapplicability or irrationality however, and new ones cannot b created by appealing to peopl to be sensible." This, of cours explains why few designers wi read this disturbing but mos significant study of America urbanization; and fewer still wi be moved by it.

For those who strugg through, with minds ope enough to forgive the author h *biases* (like *The Urban Village* before it, *The Levittowners* do not deign to provide even th crudest map of the community it will provide insights into wh kind of design may be social and democratically relevant. An that is a major accomplishme in this day of riot-torn citi and threatened suburbs.





The Old Schoolhouse in Palisades, New York, has one classroom. One teacher (Mrs. Pauline Lewis) and 24 students. Steve Sefchick, 9, is one of them. Steve's bright. Above average for his age. Yet, six months ago, Mrs. Lewis was seriously worried about him. Steve wasn't concentrating. His marks were falling off. Perhaps it was the atmosphere. Too much note-passing. Too much giggling. Too much noise.

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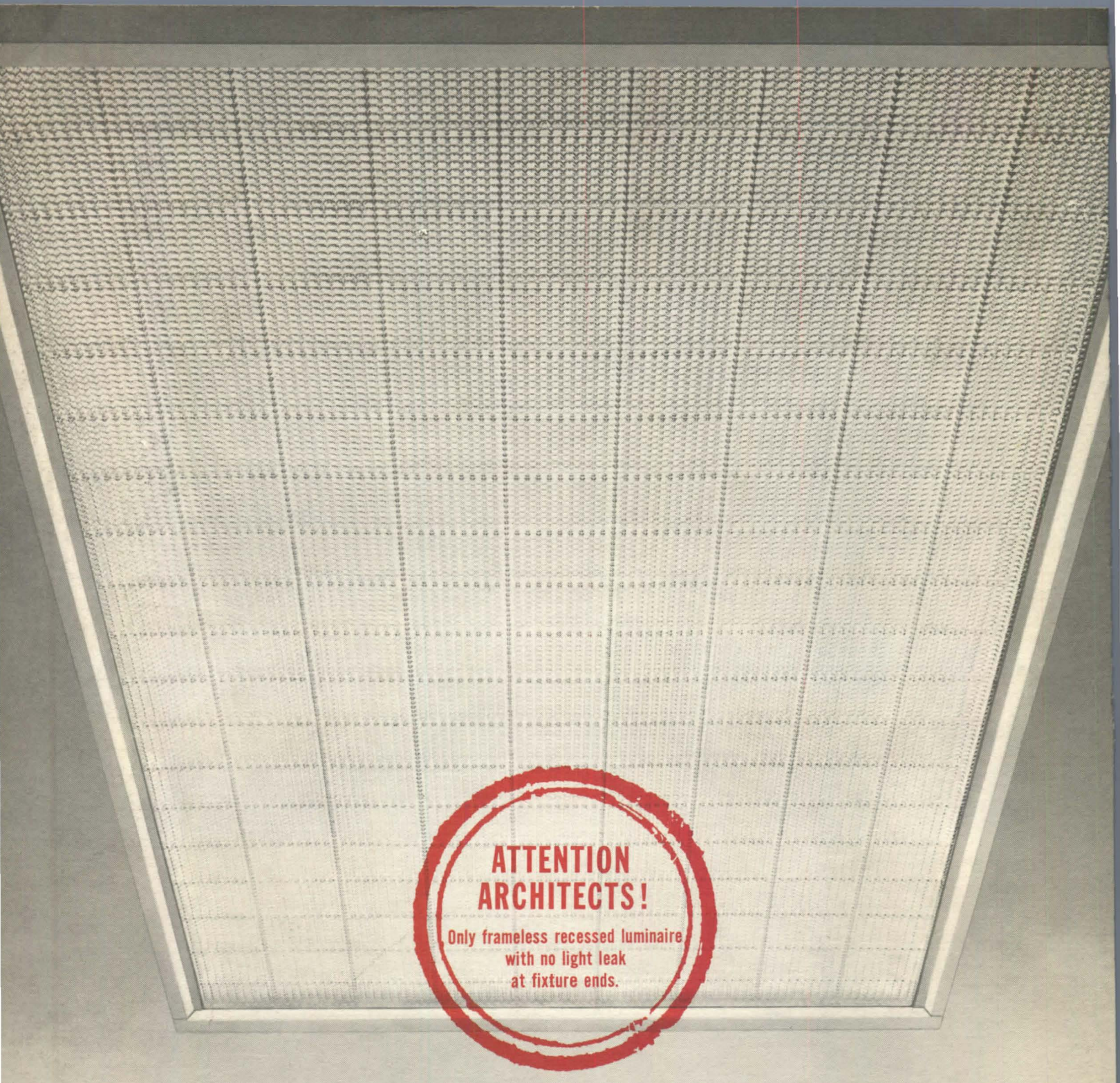
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